

CHAPTER 3: CLINICAL PRESENTATIONS & INVESTIGATIONS

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Summary

1. The spectrum of ACS in 2014 – 2015 revealed that the commonest subtype was STEMI (46.1%), similar to previous years. However, unstable angina at 28.7% had overtaken NSTEMI. Two-thirds of STEMI had intermediate-high TIMI risk score; whereas NSTEMI-UA had a slightly higher intermediate-high score in 2014 – 2015 compared to 2011 – 2013.
2. The proportion of STEMI remained highest in young patients. The proportion of NSTEMI-UA amongst the elderly ACS cases increased to 62.9%. The proportion of Killip III–IV in the elderly patients had doubled compared to the younger patients.
3. Gender ratio of male:female remained at 4:1 for ACS. 50.5% of men presented with STEMI whereas 70.8% of women presented with NSTEMI/UA.
4. About 43% of ACS patients were diabetic and 60.8% were hypertensive. Among STEMI patients, 38.0% were diabetic and 36.1% were hypertensive. These cohorts of patients have higher Killip III & IV at presentation. The median total cholesterol and LDL-cholesterol were higher in STEMI compared to NSTEMI/UA.

This chapter presents the results of clinical presentation and investigations of patients who were notified and registered in the NCVD-ACS registry in year 2014 – 2015. The outlines of the discussion are:

- 1) Epidemiology
- 2) Clinical presentation
- 3) Diagnosis
- 4) Risk factors: diabetes, dyslipidaemia, hypertension

Epidemiology & clinical presentation

A total of 17,771 ACS were analysed in 2014 – 2015 from our NCVD-ACS registry; of which 8,190 were STEMI (46.1%), 4,479 NSTEMI (25.2%) and 5,102 unstable anginas (UA) (28.7%). Similar to the previous cohorts, STEMI remained the commonest ACS subtype (46.1%). Compared to the previous cohort, mean heart rate, mean SBP and mean DBP were similar. Patients with NSTEMI/UA were older and had higher CV risk factors compared to STEMI patients.

Across the spectrum of ACS, the majority of STEMI patients had angina symptoms within 24 hours compared to NSTEMI/UA (Table 3.1). This observation highlights the importance of public education, to recognise early warning symptoms and to seek early medical attention. Amongst STEMI patients, 67.4% of patients have intermediate-high TIMI risk score, similar to the 2011 – 2013 cohorts (70.3%). Amongst NSTEMI-UA, 48.4% had intermediate-high score in 2014 – 2015, compared to 41.5% in 2011 – 2013. There seem to be an increasing trend of ACS patients who presented with cardiogenic shock compared to the previous cohort (STEMI; 14.7% vs. 13.4%; NSTEMI/UA, 8.3% vs 6.7%).

About 70% of STEMI patients had an echocardiogram examination during the index admission compared to 50% in NSTEMI and 30% in UA. With regards to ECG patterns in patients with STEMI, 52.3% were anterior. 22.2% had lateral involvement, and 7.5% and 7.1% had posterior and right ventricular (RV) involvement respectively.

The proportion of STEMI was highest in young patients, and decreased with advancing age (63.8% in young aged group [20-<40 years old], 52% in middle aged group [40-<60 years old], 37.1% in elderly aged group [≥60 years old]), similar to previous years. For NSTEMI/UA, the proportion of elderly patients was higher than the previous cohort (62.9% vs. 57.8%). Killip III–IV was higher in the older sub-group (9.3% in 20 – < 40 years, 13.9% in 40 – < 60 years, and 18.2% in ≥ 60 years).

The gender ratio of male:female remained at 4:1 for ACS. STEMI comprised 50% of ACS in men. In contrast, NSTEMI-UA occurred more in women (70.8%). Elderly or female patients tend to have higher systolic blood pressure on presentation.

Pre-morbid risk factors

Diabetes mellitus

About 43% of the patients were diabetic. The highest incidence were seen in STEMI (38.0%) followed by unstable angina (32.9%) and NSTEMI (29.1%). ACS patients with diabetes mellitus had higher SBP (median 139 mmHg vs. 135 mmHg), wider pulse pressure (median 57 mmHg vs. 52 mmHg), higher heart rate (median 83/min vs. 79/min), higher HbA1c (median 8.2% vs. 5.8%), and higher Killip class III & IV at presentation (17.8% vs. 13.3%). Non-diabetic patients had higher LDL (median 3.3 mmol/L vs. 2.8 mmol/L) (Table 3.4).

Hypertension

60.8% of ACS patients were hypertensive. More patients with STEMI had hypertension followed by unstable angina and NSTEMI (36.1%, 35.0% and 28.9% respectively). Hypertensive patients had wider pulse pressure (median 58 mmHg vs. 49 mmHg), higher heart rate at presentation (median 82/min vs 80/min), higher Killip class III and IV (15.7% vs. 14.9%) and higher HbA1c (median 6.9% vs 6.3%) (Table 3.5).

Dyslipidaemia

Medical history of dyslipidaemia was higher in unstable angina (41.7%) compared to NSTEMI (29.6%) and STEMI (28.8%). The median total cholesterol was higher in STEMI followed by NSTEMI and unstable angina; 5.3 mmol/L, 4.9 mmol/L, and 4.5 mmol/L respectively. The same trend was seen for LDL-cholesterol (3.4 mmol/L, 3.0 mmol/L and 2.7 mmol/L respectively). Patients with dyslipidaemia had higher SBP (median 139 mmHg vs. 135 mmHg), wider pulse pressure (median 57 mmHg vs. 53 mmHg) and higher HbA1c (median 6.8% vs. 6.6%) than those without dyslipidaemia (Table 3.6).

Discussion

The commonest ACS presentation was STEMI (46.1%). The guiding principle that “time is muscle” in emergency cardiology implies that every patient with STEMI should be taken up for thrombolysis or primary PCI at the earliest after the onset of symptoms. As diabetes, hypertension and dyslipidaemia are strongly associated with ACS, primary prevention program should be reinforced.

Table 3.1 Cardiac presentation of patients with ACS by ACS stratum, NCVD-ACS Registry, 2014 – 2015

Year	2011 – 2013			2014			2015			2014 – 2015		
	STEMI	NSTEMI	UA	STEMI	NSTEMI	UA	STEMI	NSTEMI	UA	STEMI	NSTEMI	UA
ACS stratum												
Total	7,502 (50.8)	3,842 (26.0)	3,419 (23.2)	3,886 (45.9)	2,049 (24.2)	2,523 (29.8)	4,304 (46.2)	2,430 (26.1)	2,579 (27.7)	8,190 (46.1)	4,479 (25.2)	5,102 (28.7)
Systolic blood pressure, mmHg												
N	7,161	3,541	3,272	3,833	1,995	2,486	4,220	2,372	2,549	8,053	4,367	5,035
Mean (SD)	132.4 (29.1)	139.9 (29.7)	144.6 (26.9)	133.7 (29.0)	141.6 (30.3)	145.5 (27.0)	134.0 (28.6)	140.7 (29.3)	143.7 (26.0)	133.8 (28.8)	141.1 (29.8)	144.6 (26.5)
Median (min, max)	130.0 (50.0, 261.0)	137.0 (56.0, 270.0)	142.0 (54.0, 268.0)	132.0 (54.0, 269.0)	138.0 (50.0, 269.0)	142.0 (56.0, 255.0)	131.0 (54.0, 250.0)	138.0 (50.0, 264.0)	141.0 (55.0, 257.0)	131.0 (54.0, 269.0)	138.0 (50.0, 269.0)	142.0 (55.0, 257.0)
IQR	37.0	38.0	35.0	36.0	39.0	33.0	35.0	36.0	35.0	35.0	37.0	34.0
Missing (%)	341 (4.5)	301 (7.8)	147 (4.3)	53 (1.4)	54 (2.6)	37 (1.5)	84 (2.0)	58 (2.4)	30 (1.2)	137 (1.7)	112 (2.5)	67 (1.3)
Diastolic blood pressure, mmHg												
N	7,147	3,531	3,265	3,835	1,995	2,481	4,224	2,367	2,548	8,059	4,362	5,029
Mean (SD)	79.8 (19.0)	81.0 (18.1)	81.6 (16.3)	80.8 (19.1)	82.2 (19.2)	81.9 (16.4)	81.1 (18.5)	81.0 (17.6)	80.4 (15.3)	81.0 (18.7)	81.6 (18.4)	81.2 (15.9)
Median (min, max)	79.0 (10.0, 170.0)	80.0 (10.0, 170.0)	80.0 (11.0, 170.0)	80.0 (10.0, 167.0)	80.0 (20.0, 159.0)	80.0 (30.0, 157.0)	80.0 (20.0, 159.0)	80.0 (30.0, 170.0)	80.0 (34.0, 148.0)	80.0 (10.0, 167.0)	80.0 (20.0, 170.0)	80.0 (30.0, 157.0)
IQR	24.0	23.0	20.0	24.0	23.0	20.0	23.0	22.0	20.0	23.0	23.0	20.0
Missing (%)	355 (4.7)	311 (8.1)	154 (4.5)	51 (1.3)	54 (2.6)	42 (1.7)	80 (1.9)	63 (2.6)	31 (1.2)	131 (1.6)	117 (2.6)	73 (1.4)
Pulse pressure, mmHg												
N	7,127	3,527	3,259	3,748	1,920	2,320	4,152	2,257	2,416	7,900	4,177	4,736
Mean (SD)	52.6 (18.6)	58.8 (21.3)	63.1 (21.1)	51.7 (16.7)	57.5 (18.2)	60.3 (17.6)	52.1 (16.9)	57.0 (18.1)	60.7 (17.6)	51.9 (16.8)	57.2 (18.2)	60.5 (17.6)
Median (min, max)	50.0 (1.0, 178.0)	55.0 (1.0, 198.0)	60.0 (5.0, 169.0)	50.0 (2.0, 100.0)	56.0 (9.0, 100.0)	60.0 (3.0, 100.0)	50.0 (6.0, 100.0)	56.0 (6.0, 100.0)	60.0 (2.0, 100.0)	50.0 (2.0, 100.0)	56.0 (6.0, 100.0)	60.0 (2.0, 100.0)
IQR	23.0	27.0	27.0	22.0	26.5	26.0	22.0	25.0	25.0	22.0	26.0	25.0
Missing (%)	489 (6.5)	450 (11.7)	334 (9.8)	138 (3.6)	129 (6.3)	203 (8.0)	152 (3.5)	173 (7.1)	163 (6.3)	290 (3.5)	302 (6.7)	366 (7.2)

Year	2011 – 2013				2014				2015				2014 – 2015			
	STEMI	NSTEMI	UA		STEMI	NSTEMI	UA		STEMI	NSTEMI	UA		STEMI	NSTEMI	UA	
ACS stratum																
Total	7,502 (50.8)	3,842 (26.0)	3,419 (23.2)		3,886 (45.9)	2,049 (24.2)	2,523 (29.8)		4,304 (46.2)	2,430 (26.1)	2,579 (27.7)		8,190 (46.1)	4,479 (25.2)	5,102 (28.7)	
Heart rate at presentation, beats/min																
N	7,113	3,515	3,262		3,780	1,973	2,469		4,199	2,358	2,540		7,979	4,331	5,009	
Mean (SD)	83.6 (21.8)	85.7 (21.3)	80.4 (18.6)		83.4 (21.8)	87.5 (23.0)	81.4 (19.3)		82.2 (20.8)	86.1 (22.1)	80.3 (19.0)		82.8 (21.3)	86.7 (22.5)	80.9 (19.1)	
Median (min, max)	81.0 (20.0, 200.0)	83.0 (28.0, 198.0)	78.0 (35.0, 195.0)		81.0 (24.0, 195.0)	84.0 (34.0, 200.0)	80.0 (26.0, 197.0)		80.0 (20.0, 190.0)	83.0 (28.0, 198.0)	78.0 (30.0, 196.0)		80.0 (20.0, 195.0)	84.0 (28.0, 200.0)	79.0 (26.0, 197.0)	
IQR	29.0	28.0	23.0		28.0	29.0	23.0		26.0	28.0	23.0		28.0	30.0	22.0	
Missing (%)	389 (5.2)	327 (8.5)	157 (4.6)		106 (2.7)	76 (3.7)	54 (2.1)		105 (2.4)	72 (3.0)	39 (1.5)		211 (2.6)	148 (3.3)	93 (1.8)	
Episodes of angina in past 24 hours, No. (%)																
0 – 2	3,230 (47.2)	1,236 (37.0)	1,315 (42.4)		1,824 (50.7)	693 (36.2)	980 (41.4)		2,513 (61.0)	1,085 (46.7)	1,235 (50.6)		4,337 (56.2)	1,778 (41.9)	2,215 (46.1)	
> 2	164 (2.4)	92 (2.8)	176 (5.6)		56 (1.6)	52 (2.7)	142 (6.0)		81 (2.0)	109 (4.7)	236 (9.7)		137 (1.8)	161 (3.8)	378 (7.9)	
Not available	3,453 (50.4)	2,006 (60.2)	1,613 (52.0)		1,715 (47.7)	1,170 (61.1)	1,243 (52.6)		1,524 (37.0)	1,130 (48.6)	969 (39.7)		3,239 (42.0)	2,300 (54.3)	2,212 (46.0)	
Missing	655	508	315		291	134	158		186	106	139		477	240	297	
Killip classification code, No. (%)																
I	3,851 (55.4)	1,566 (52.5)	1,267 (55.6)		2,364 (62.3)	1,078 (66.3)	1,212 (84.2)		2,690 (62.5)	1,106 (45.5)	1,211 (47.0)		5,054 (63.5)	2,184 (65.9)	2,423 (86.3)	
II	1,272 (18.3)	467 (15.6)	261 (11.4)		688 (18.1)	304 (18.7)	169 (11.7)		714 (16.6)	259 (10.7)	115 (4.5)		1,402 (17.6)	563 (17.0)	284 (10.1)	
III	314 (4.5)	151 (5.0)	44 (2.0)		162 (4.3)	139 (8.5)	43 (3.0)		177 (4.1)	187 (7.7)	24 (0.9)		339 (4.3)	326 (9.8)	67 (2.4)	
IV	927 (13.4)	163 (5.5)	29 (1.2)		577 (15.2)	105 (6.5)	15 (1.0)		590 (13.7)	134 (5.5)	17 (0.7)		1,167 (14.7)	239 (7.2)	32 (1.1)	
Not stated/ inadequately described	577 (8.4)	642 (21.4)	681 (29.8)		1 (0.0)	1 (0.1)	1 (0.1)		133 (3.1)	744 (30.6)	1,212 (47.0)		1 (0.0)	1 (0.0)	1 (0.0)	
Not available	266	436	839		94	421	1,083		0	0	0		227	1,165	2,295	
Missing	295	417	298		0	1	0		0	0	0		0	1	0	

Year	2011 – 2013				2014				2015				2014 – 2015			
	STEMI	NSTEMI	UA		STEMI	NSTEMI	UA		STEMI	NSTEMI	UA		STEMI	NSTEMI	UA	
ACS stratum																
Total	7,502 (50.8)	3,842 (26.0)	3,419 (23.2)		3,886 (45.9)	2,049 (24.2)	2,523 (29.8)		4,304 (46.2)	2,430 (26.1)	2,579 (27.7)		8,190 (46.1)	4,479 (25.2)	5,102 (28.7)	
Total cholesterol, mmol/L																
N	5,922	2,557	2,129		3,108	1,480	1,828		3,599	1,813	1,939		6,707	3,293	3,767	
Mean (SD)	5.4 (1.4)	5.0 (1.5)	4.8 (1.3)		5.3 (1.4)	5.0 (1.5)	4.7 (1.3)		5.3 (1.4)	4.9 (1.4)	4.7 (1.3)		5.3 (1.4)	4.9 (1.5)	4.7 (1.3)	
Median (min, max)	5.3 (2.0, 14.5)	4.8 (2.0, 17.0)	4.6 (2.0, 16.9)		5.2 (2.0, 14.0)	4.8 (2.0, 22.0)	4.5 (2.0, 16.6)		5.2 (2.0, 17.7)	4.8 (2.0, 15.5)	4.5 (2.0, 12.6)		5.2 (2.0, 17.7)	4.8 (2.0, 22.0)	4.5 (2.0, 16.6)	
IQR	1.8	1.9	1.7		1.8	1.9	1.7		1.8	1.9	1.7		1.8	1.9	1.7	
Test not done (%)	1,053 (15.1)	931 (26.7)	1,088 (33.8)		555 (15.2)	452 (23.4)	598 (24.6)		509 (12.4)	509 (21.9)	574 (22.8)		1,064 (13.7)	961 (22.6)	1,172 (23.7)	
Missing (%)	527 (7.0)	354 (9.2)	202 (5.9)		223 (5.7)	117 (5.7)	97 (3.8)		196 (4.6)	108 (4.4)	66 (2.6)		419 (5.1)	225 (5.0)	163 (3.2)	
HDL-C, mmol/L																
N	5,668	2,520	2,091		3,039	1,452	1,801		3,568	1,792	1,927		6,607	3,244	3,728	
Mean (SD)	1.1 (0.3)	1.1 (0.4)	1.1 (0.4)		1.1 (0.3)	1.1 (0.4)	1.1 (0.3)		1.1 (0.3)	1.1 (0.3)	1.1 (0.4)		1.1 (0.3)	1.1 (0.4)	1.1 (0.3)	
Median (min, max)	1.0 (0.5, 4.9)	1.0 (0.5, 4.6)	1.0 (0.5, 4.5)		1.0 (0.5, 4.5)	1.0 (0.5, 4.7)	1.0 (0.5, 3.1)		1.0 (0.5, 4.9)	1.0 (0.5, 4.3)	1.0 (0.5, 4.6)		1.0 (0.5, 4.9)	1.0 (0.5, 4.7)	1.0 (0.5, 4.6)	
IQR	0.3	0.3	0.3		0.3	0.4	0.4		0.3	0.4	0.4		0.3	0.4	0.4	
Test not done (%)	1,246 (18.0)	947 (27.3)	1,091 (34.3)		589 (16.2)	452 (23.7)	602 (25.1)		527 (12.9)	507 (22.1)	577 (23.0)		1,116 (14.5)	959 (22.8)	1,179 (24.0)	
Missing (%)	588 (7.8)	375 (9.8)	237 (6.9)		258 (6.6)	145 (7.1)	120 (4.8)		209 (4.9)	131 (5.4)	75 (2.9)		467 (5.7)	276 (6.2)	195 (3.8)	
LDL-C, mmol/L																
N	5,715	2,537	2,073		3,069	1,466	1,789		3,576	1,816	1,920		6,645	3,282	3,709	
Mean (SD)	3.5 (1.3)	3.1 (1.3)	2.9 (1.2)		3.5 (1.3)	3.1 (1.3)	2.8 (1.2)		3.5 (1.3)	3.1 (1.3)	2.8 (1.2)		3.5 (1.3)	3.1 (1.3)	2.8 (1.2)	
Median (min, max)	3.4 (0.5, 12.3)	2.9 (0.5, 10.9)	2.7 (0.5, 9.5)		3.4 (0.5, 12.0)	3.0 (0.5, 18.0)	2.7 (0.5, 14.8)		3.4 (0.5, 9.8)	3.0 (0.5, 8.6)	2.6 (0.6, 13.0)		3.4 (0.5, 12.0)	3.0 (0.5, 18.0)	2.7 (0.5, 14.8)	
IQR	1.7	1.7	1.4		1.6	1.7	1.5		1.6	1.7	1.5		1.6	1.7	1.5	
Test not done (%)	1,281 (18.3)	974 (27.7)	1,136 (35.4)		613 (16.6)	470 (24.3)	638 (26.3)		544 (13.2)	522 (22.3)	599 (23.8)		1,157 (14.8)	992 (23.2)	1,237 (25.0)	
Missing (%)	506 (6.7)	331 (8.6)	210 (6.1)		204 (5.2)	113 (5.5)	96 (3.8)		184 (4.3)	92 (3.8)	60 (2.3)		388 (4.7)	205 (4.6)	156 (3.1)	

Year	2011 – 2013			2014			2013			2011 – 2013		
	STEMI	NSTEMI	UA	STEMI	NSTEMI	UA	STEMI	NSTEMI	UA	STEMI	NSTEMI	UA
ACS stratum												
Total	7,502 (50.8)	3,842 (26.0)	3,419 (23.2)	3,886 (45.9)	2,049 (24.2)	2,523 (29.8)	4,304 (46.2)	2,430 (26.1)	2,579 (27.7)	8,190 (46.1)	4,479 (25.2)	5,102 (28.7)
Triglycerides, mmol/L												
N	5901	2535	2093	3,092	1,478	1,818	3,589	1,816	1,928	6,681	3,294	3,746
Mean (SD)	1.7 (1.1)	1.7 (1.1)	1.7 (1.1)	1.7 (1.0)	1.6 (1.0)	1.7 (1.2)	1.7 (1.0)	1.7 (1.0)	1.7 (1.1)	1.7 (1.0)	1.7 (1.0)	1.7 (1.1)
Median (min, max)	1.5 (0.5, 15.0)	1.4 (0.5, 13.9)	1.5 (0.5, 14.6)	1.5 (0.5, 14.4)	1.4 (0.5, 10.4)	1.4 (0.5, 13.3)	1.5 (0.5, 10.6)	1.4 (0.5, 13.9)	1.5 (0.5, 12.6)	1.5 (0.5, 14.4)	1.4 (0.5, 13.9)	1.4 (0.5, 13.3)
IQR	0.9	1.0	1.0	0.9	0.9	1.0	0.9	0.9	0.9	0.9	0.8	1.0
Test not done (%)	1,079 (15.5)	951 (27.3)	1,106 (34.6)	568 (15.5)	457 (23.6)	604 (24.9)	519 (12.6)	508 (21.9)	569 (22.8)	1,087 (14.0)	965 (22.7)	1,173 (23.8)
Missing (%)	522 (7.0)	356 (9.3)	220 (6.4)	226 (5.8)	114 (5.6)	101 (4.0)	196 (4.6)	106 (4.4)	82 (3.2)	422 (5.2)	220 (4.9)	183 (3.6)
*HbA1c, mmol/L												
	<i>only for 2013</i>											
N	560	260	189	842	560	595	1,077	675	646	1,919	1,235	1,241
Mean (SD)	7.6 (2.8)	7.6 (2.1)	7.7 (2.8)	7.6 (2.7)	7.3 (2.3)	7.3 (2.6)	7.8 (3.1)	7.8 (2.9)	7.6 (2.5)	7.7 (2.9)	7.6 (2.6)	7.4 (2.6)
Median (min, max)	6.6 (4.2, 32.0)	7.2 (4.2, 16.5)	6.5 (4.8, 29.0)	6.5 (4.0, 31.0)	6.5 (4.0, 20.3)	6.4 (4.1, 32.0)	6.5 (4.0, 32.0)	7.0 (4.3, 32.0)	6.8 (4.0, 30.0)	6.5 (4.0, 32.0)	6.7 (4.0, 32.0)	6.6 (4.0, 32.0)
IQR	3.1	2.6	2.8	3.4	2.8	2.6	3.6	3.0	2.6	3.5	2.9	2.6
Test not done (%)	1,445 (72.1)	807 (75.6)	970 (83.7)	2,177 (72.1)	1,184 (67.9)	1,693 (74.0)	2,479 (69.7)	1,414 (67.7)	1,592 (71.1)	4,656 (70.8)	2,598 (67.8)	3,285 (72.6)
Missing (%)	1,056 (34.5)	535 (33.4)	305 (20.8)	867 (22.3)	305 (14.9)	235 (9.3)	748 (17.4)	341 (14.0)	341 (13.2)	1,615 (19.7)	646 (14.4)	576 (11.3)
Left ventricular ejection fraction, %												
N	4,141	1,667	907	2,488	1,040	786	2,913	1,262	941	5,401	2,302	1,727
Mean (SD)	45.8 (11.9)	46.6 (14.3)	50.7 (15.2)	45.2 (11.6)	46.5 (13.9)	51.3 (15.4)	45.7 (11.2)	45.5 (13.8)	51.4 (14.7)	45.5 (11.4)	46.0 (13.9)	51.4 (15.0)
Median (min, max)	45.0 (6.3, 88.0)	48.0 (6.4, 89.0)	54.2 (5.3, 84.0)	45.0 (5.1, 85.0)	46.0 (10.0, 90.0)	55.0 (5.5, 88.0)	45.0 (5.3, 84.0)	45.0 (6.8, 87.0)	55.0 (5.9, 90.0)	45.0 (5.1, 85.0)	45.0 (6.8, 90.0)	55.0 (5.5, 90.0)
IQR	16.0	22.0	22.0	14.0	20.0	17.0	12.0	20.0	15.0	13.0	20.0	16.0
Test not done (%)	2,353 (36.2)	1,495 (47.3)	2,087 (69.7)	1,060 (29.9)	858 (45.2)	1,585 (66.8)	1,187 (29.0)	1,028 (44.9)	1,429 (60.3)	2,247 (29.4)	1,886 (45.0)	3,014 (63.6)
Missing (%)	1,008 (13.4)	680 (17.7)	425 (12.4)	338 (8.7)	151 (7.4)	152 (6.0)	204 (4.7)	140 (5.8)	209 (8.1)	542 (6.6)	291 (6.5)	361 (7.1)

Year	2011 – 2013			2014			2013			2011 – 2013		
	STEMI	NSTEMI	UA	STEMI	NSTEMI	UA	STEMI	NSTEMI	UA	STEMI	NSTEMI	UA
ACS stratum												
Total	7,502 (50.8)	3,842 (26.0)	3,419 (23.2)	3,886 (45.9)	2,049 (24.2)	2,523 (29.8)	4,304 (46.2)	2,430 (26.1)	2,579 (27.7)	8,190 (46.1)	4,479 (25.2)	5,102 (28.7)
Left ventricular ejection fraction, No. (%)												
≤ 40	1,438 (34.7)	581 (34.9)	234 (25.8)	918 (36.9)	380 (36.5)	187 (23.8)	978 (33.6)	479 (38.0)	211 (22.4)	1,896 (35.1)	859 (37.3)	398 (23.0)
41 – 49	1,028 (24.8)	290 (17.4)	123 (13.6)	618 (24.8)	187 (18.0)	106 (13.5)	856 (29.4)	251 (19.9)	112 (11.9)	1,474 (27.3)	438 (19.0)	218 (12.6)
≥ 50	1,675 (40.4)	796 (47.8)	550 (60.6)	952 (38.3)	473 (45.5)	493 (62.7)	1,079 (37.0)	532 (42.2)	618 (65.7)	2,031 (37.6)	1,005 (43.7)	1,111 (64.3)
Missing	3,361	2,175	2,512	1,398	1,009	1,737	1,391	1,168	1,638	2,789	2,177	3,375
ECG, No. (%)												
Inferior leads	3,471 (46.2)	887 (23.0)	578 (17.0)	1,808 (46.5)	493 (24.1)	431 (17.1)	2,134 (49.6)	585 (24.1)	412 (16.0)	3,942 (48.1)	1,078 (24.1)	843 (16.5)
Anterior leads	4,011 (53.4)	1,227 (32.0)	945 (27.6)	2,091 (53.8)	752 (36.7)	626 (24.8)	2,195 (51.0)	848 (34.9)	571 (22.1)	4,286 (52.3)	1,600 (35.7)	1,197 (23.5)
Lateral leads	1,471 (19.6)	1,319 (34.4)	984 (28.8)	845 (21.7)	865 (42.2)	814 (32.3)	973 (22.6)	1,029 (42.3)	799 (31.0)	1,818 (22.2)	1,894 (42.3)	1,613 (31.6)
True posterior	564 (7.6)	51 (1.4)	42 (1.2)	279 (7.2)	36 (1.8)	32 (1.3)	334 (7.8)	28 (1.2)	41 (1.6)	613 (7.5)	64 (1.4)	73 (1.4)
Right ventricle	448 (6.0)	16 (0.4)	4 (0.2)	253 (6.5)	4 (0.2)	2 (0.1)	326 (7.6)	12 (0.5)	8 (0.3)	579 (7.1)	16 (0.4)	10 (0.2)
None	62 (0.8)	753 (19.6)	1,003 (29.4)	28 (0.7)	351 (17.1)	719 (28.5)	21 (0.5)	383 (15.8)	879 (34.1)	49 (0.6)	734 (16.4)	1,598 (31.3)
Not stated/ inadequately described	133 (1.8)	311 (8.0)	383 (11.2)	38 (1.0)	147 (7.2)	374 (14.8)	66 (1.5)	196 (8.1)	293 (11.4)	104 (1.3)	343 (7.7)	667 (13.1)

Year	2011 – 2013			2014			2013			2011 – 2013		
	STEMI	NSTEMI	UA	STEMI	NSTEMI	UA	STEMI	NSTEMI	UA	STEMI	NSTEMI	UA
ACS stratum												
Total	7,502 (50.8)	3,842 (26.0)	3,419 (23.2)	3,886 (45.9)	2,049 (24.2)	2,523 (29.8)	4,304 (46.2)	2,430 (26.1)	2,579 (27.7)	8,190 (46.1)	4,479 (25.2)	5,102 (28.7)
Total number of STEMI patients who were given fibrinolytic therapy at this centre	3,717 (49.5)			1,806 (46.5)			1,861 (43.2)			3,667 (44.8)		
Pain-to-needle time, min (** symptom to treatment)												
N	2,840			1,515			1,572			3,087		
Mean (SD)	288.0 (252.5)			295.7 (252.6)			283.2 (242.1)			289.4 (247.3)		
Median (min, max)	210.0 (15.0, 1439.0)			220.0 (15.0, 1425.0)			200.0 (15.0, 1440.0)			210.0 (15.0, 1440.0)		
IQR	230.0			215.0			215.0			215.0		
Missing	877 (23.6)			291 (16.1)			289 (15.5)			580 (15.8)		
Pain-to-needle time, No. (%)												
≤ 180 min	1,283 (45.2)			625 (41.3)			699 (44.5)			1,324 (42.9)		
> 180 min	1,557 (54.8)			890 (58.7)			873 (55.5)			1,763 (57.1)		
Missing	877			291			289			580		

* Definition was different in CRF version 2013 ** Symptom to treatment is the time difference between onset of ACS symptom and when patient was given fibrinolytic therapy

Table 3.2 Cardiac presentation of patients with ACS by age group (years), NCVd-ACS Registry, 2014 – 2015

Year	2011 – 2013			2014			2015			2014 – 2015		
	Young	Middle-aged	Elderly	Young	Middle-aged	Elderly	Young	Middle-aged	Elderly	Young	Middle-aged	Elderly
ACS stratum												
Total	958 (6.5)	7,254 (49.1)	6,551 (44.4)	558 (6.6)	4,084 (48.3)	3,816 (45.1)	667 (7.2)	4,478 (48.1)	4,168 (44.8)	1,225 (6.9)	8,562 (48.2)	7,984 (44.9)
ACS stratum, No. (%)												
STEMI	655 (68.4)	4,089 (56.4)	2,758 (42.1)	353 (63.3)	2,122 (52.0)	1,411 (37.0)	428 (64.2)	2,328 (52.0)	1,548 (37.1)	781 (63.8)	4,450 (52.0)	2,959 (37.1)
NSTEMI	164 (17.1)	1,667 (23.0)	2,011 (30.7)	83 (14.9)	870 (21.3)	1,096 (28.7)	102 (15.3)	1,045 (23.3)	1,283 (30.8)	185 (15.1)	1,915 (22.4)	2,379 (29.8)
UA	139 (14.5)	1,498 (20.7)	1,782 (27.2)	122 (21.9)	1,092 (26.7)	1,309 (34.3)	137 (20.5)	1,105 (24.7)	1,337 (32.1)	259 (21.1)	2,197 (25.7)	2,646 (33.1)
Systolic blood pressure, mmHg												
N	901	6,883	6,190	549	4,023	3,742	657	4,395	4,089	1,206	8,418	7,831
Mean (SD)	131.5 (25.5)	135.9 (27.9)	139.4 (31.0)	136.4 (27.0)	138.0 (28.6)	140.7 (30.1)	134.9 (25.7)	137.5 (27.8)	140.1 (29.3)	135.6 (26.3)	137.7 (28.2)	140.4 (29.7)
Median (min, max)	129.0 (70.0, 253.0)	134.0 (50.0, 270.0)	137.0 (52.0, 270.0)	134.0 (60.0, 269.0)	136.0 (56.0, 256.0)	139.0 (50.0, 266.0)	132.0 (66.0, 257.0)	135.0 (58.0, 264.0)	138.0 (50.0, 254.0)	133.0 (60.0, 269.0)	135.0 (56.0, 264.0)	138.0 (50.0, 266.0)
IQR	33.0	35.0	39.0	33.0	35.0	39.0	31.0	35.0	37.0	31.0	35.0	38.0
Missing (%)	57 (5.9)	371 (5.1)	361 (5.5)	9 (1.6)	61 (1.5)	74 (1.9)	10 (1.5)	83 (1.9)	79 (1.9)	19 (1.6)	144 (1.7)	153 (1.9)
Diastolic blood pressure, mmHg												
N	896	6,869	6,178	549	4,022	3,740	656	4,395	4,088	1,205	8,417	7,828
Mean (SD)	81.2 (18.1)	82.5 (18.1)	78.3 (18.1)	84.5 (18.7)	83.8 (18.3)	78.5 (17.9)	84.6 (18.1)	82.8 (17.3)	78.3 (17.0)	84.5 (18.4)	83.3 (17.8)	78.4 (17.5)
Median (min, max)	80.0 (37.0, 168.0)	81.0 (10.0, 170.0)	77.0 (10.0, 170.0)	83.0 (25.0, 157.0)	82.0 (10.0, 167.0)	78.0 (20.0, 163.0)	83.0 (40.0, 156.0)	81.0 (31.0, 160.0)	77.0 (20.0, 170.0)	83.0 (25.0, 157.0)	82.0 (10.0, 167.0)	77.0 (20.0, 170.0)
IQR	23.0	23.0	23.0	24.0	22.0	23.5	23.0	22.0	21.0	24.0	23.0	22.0
Missing (%)	62 (6.5)	385 (5.3)	373 (5.7)	9 (1.6)	62 (1.5)	76 (2.0)	11 (1.6)	83 (1.9)	80 (1.9)	20 (1.6)	145 (1.7)	156 (2.0)
Pulse pressure, mmHg												
N	885	6,749	5,856	544	3,923	3,521	649	4,308	3,868	1,193	8,231	7,389
Mean (SD)	49.5 (15.0)	52.6 (16.6)	58.2 (18.6)	51.2 (15.4)	53.0 (16.8)	59.2 (18.5)	50.0 (14.1)	53.6 (17.1)	59.0 (18.4)	50.5 (14.7)	53.3 (17.0)	59.1 (18.4)
Median (min, max)	48.0 (1.0, 100.0)	50.0 (3.0, 100.0)	57.0 (1.0, 100.0)	49.0 (14.0, 100.0)	51.0 (2.0, 100.0)	59.0 (3.0, 100.0)	48.0 (18.0, 96.0)	52.0 (2.0, 100.0)	59.0 (6.0, 100.0)	48.0 (14.0, 100.0)	51.0 (2.0, 100.0)	59.0 (3.0, 100.0)
IQR	18.0	23.0	27.0	19.0	22.0	27.0	18.0	23.0	26.0	20.0	23.0	27.0
Missing (%)	73 (7.6)	505 (7.0)	695 (10.6)	14 (2.5)	161 (3.9)	295 (7.7)	18 (2.7)	170 (3.8)	300 (7.2)	32 (2.6)	331 (3.9)	595 (7.5)

Year	2011 – 2013			2014			2015			2014 – 2015		
	Young	Middle-aged	Elderly	Young	Middle-aged	Elderly	Young	Middle-aged	Elderly	Young	Middle-aged	Elderly
ACS stratum												
Total	958 (6.5)	7,254 (49.1)	6,551 (44.4)	558 (6.6)	4,084 (48.3)	3,816 (45.1)	667 (7.2)	4,478 (48.1)	4,168 (44.8)	1,225 (6.9)	8,562 (48.2)	7,984 (44.9)
Heart rate at presentation, beats/min												
N	892	6,832	6,166	547	3,966	3,709	654	4,378	4,065	1,201	8,344	7,774
Mean (SD)	84.0 (18.8)	83.2 (20.3)	83.5 (22.1)	84.6 (20.1)	83.4 (20.9)	84.1 (22.3)	83.7 (19.7)	82.5 (20.0)	82.7 (21.7)	84.1 (19.9)	82.9 (20.5)	83.4 (22.0)
Median (min, max)	82.0 (20.0, 162.0)	81.0 (30.0, 200.0)	81.0 (25.0, 195.0)	81.0 (42.0, 190.0)	80.0 (24.0, 200.0)	81.0 (26.0, 197.0)	81.0 (30.0, 190.0)	80.0 (20.0, 198.0)	80.0 (28.0, 196.0)	81.0 (30.0, 190.0)	80.0 (20.0, 200.0)	80.0 (26.0, 197.0)
IQR	26.0	26.0	28.0	26.0	26.0	29.0	24.0	26.0	27.0	25.0	26.0	28.0
Missing (%)	66 (6.9)	422 (5.8)	385 (5.9)	11 (2.0)	118 (2.9)	107 (2.8)	13 (1.9)	100 (2.2)	103 (2.5)	24 (2.0)	218 (2.5)	210 (2.6)
Episodes of angina in past 24 hours, No. (%)												
0 – 2	400 (46.6)	2,942 (45.3)	2,439 (41.1)	270 (52.8)	1,768 (46.7)	1,459 (40.8)	384 (59.4)	2,390 (55.7)	2,059 (52.2)	654 (56.5)	4,158 (51.5)	3,518 (46.8)
> 2	25 (2.9)	212 (3.3)	195 (3.3)	12 (2.3)	121 (3.2)	117 (3.3)	37 (5.7)	202 (4.7)	187 (4.7)	49 (4.2)	323 (4.0)	304 (4.0)
Not available	434 (50.5)	3,343 (51.5)	3,295 (55.6)	229 (44.8)	1,898 (50.1)	2,001 (55.9)	226 (34.9)	1,695 (39.5)	1,702 (43.1)	455 (39.3)	3,593 (44.5)	3,703 (49.2)
Missing (%)	99	757	622	47	297	239	20	191	220	67	488	459
Killip classification code, No. (%)												
I	565 (68.7)	3,585 (59.1)	2,534 (47.6)	388 (83.1)	2,401 (70.6)	1,865 (62.4)	453 (67.9)	2,558 (57.1)	1,996 (47.9)	841 (82.2)	4,959 (71.3)	3,861 (63.2)
II	74 (9.0)	879 (14.5)	1,047 (19.7)	34 (7.3)	521 (15.3)	606 (20.3)	52 (7.8)	506 (11.3)	530 (12.7)	86 (8.4)	1,027 (14.8)	1,136 (18.6)
III	18 (2.2)	204 (3.4)	287 (5.4)	8 (1.7)	146 (4.3)	190 (6.4)	11 (1.6)	146 (3.3)	231 (5.5)	19 (1.9)	292 (4.2)	421 (6.9)
IV	49 (6.0)	520 (8.6)	550 (10.3)	36 (7.7)	332 (9.8)	329 (11.0)	40 (6.0)	341 (7.6)	360 (8.6)	76 (7.4)	673 (9.7)	689 (11.3)
Not stated/ inadequately described	116 (14.1)	883 (14.5)	901 (16.9)	1 (0.2)	1 (0.0)	1 (0.0)	111 (16.6)	927 (20.7)	1,051 (25.2)	1 (0.1)	1 (0.0)	1 (0.0)
Not available	72	694	775	91	682	825	0	0	0	202	1,609	1,876
Missing	64	489	457	0	1	0	0	0	0	0	1	0

Year	2011 – 2013			2014			2015			2014 – 2015		
	Young	Middle-aged	Elderly	Young	Middle-aged	Elderly	Young	Middle-aged	Elderly	Young	Middle-aged	Elderly
ACS stratum												
Total	958 (6.5)	7,254 (49.1)	6,551 (44.4)	558 (6.6)	4,084 (48.3)	3,816 (45.1)	667 (7.2)	4,478 (48.1)	4,168 (44.8)	1,225 (6.9)	8,562 (48.2)	7,984 (44.9)
Total cholesterol, mmol/L												
N	737	5,367	4,504	461	3,128	2,827	567	3,643	3,141	1,028	6,771	5,968
Mean (SD)	5.4 (1.4)	5.4 (1.5)	4.8 (1.4)	5.4 (1.5)	5.3 (1.4)	4.8 (1.4)	5.5 (1.5)	5.2 (1.4)	4.8 (1.4)	5.5 (1.5)	5.2 (1.4)	4.8 (1.4)
Median (min, max)	5.3 (2.2, 16.9)	5.2 (2.0, 14.6)	4.7 (2.0, 17.0)	5.2 (2.0, 11.0)	5.2 (2.0, 14.4)	4.6 (2.0, 22.0)	5.4 (2.4, 17.7)	5.1 (2.0, 15.5)	4.6 (2.0, 12.5)	5.3 (2.0, 17.7)	5.2 (2.0, 15.5)	4.6 (2.0, 22.0)
IQR	1.7	1.9	1.9	1.8	1.8	1.8	1.8	1.9	1.8	1.8	1.9	1.8
Test not done (%)	142 (16.2)	1,342 (20.0)	1,588 (26.1)	74 (13.8)	719 (18.7)	812 (22.3)	82 (12.6)	665 (15.4)	845 (21.2)	156 (13.2)	1,384 (17.0)	1,657 (21.7)
Missing (%)	79 (8.2)	545 (7.5)	459 (7.0)	23 (4.1)	237 (5.8)	177 (4.6)	18 (2.7)	170 (3.8)	182 (4.4)	41 (3.3)	407 (4.8)	359 (4.5)
HDL-C, mmol/L												
N	717	5,210	4,352	446	3,073	2,773	560	3,601	3,126	1,006	6,674	5,899
Mean (SD)	1.0 (0.3)	1.1 (0.3)	1.1 (0.4)	1.0 (0.3)	1.1 (0.3)	1.1 (0.4)	1.0 (0.4)	1.0 (0.3)	1.1 (0.4)	1.0 (0.4)	1.0 (0.3)	1.1 (0.4)
Median (min, max)	1.0 (0.5, 4.3)	1.0 (0.5, 4.9)	1.1 (0.5, 4.6)	1.0 (0.5, 4.0)	1.0 (0.5, 4.6)	1.1 (0.5, 4.7)	1.0 (0.5, 4.9)	1.0 (0.5, 4.3)	1.1 (0.5, 4.6)	1.0 (0.5, 4.9)	1.0 (0.5, 4.6)	1.1 (0.5, 4.7)
IQR	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4
Test not done (%)	153 (17.6)	1,442 (21.7)	1,689 (28.0)	76 (14.6)	733 (19.3)	834 (23.1)	84 (13.0)	672 (15.7)	855 (21.5)	160 (13.7)	1,405 (17.4)	1,689 (22.3)
Missing (%)	88 (9.2)	602 (8.3)	510 (7.8)	36 (6.5)	278 (6.8)	209 (5.5)	23 (3.4)	205 (4.6)	187 (4.5)	59 (4.8)	483 (5.6)	396 (5.0)
LDL-C, mmol/L												
N	721	5,210	4,394	451	3,068	2,805	555	3,608	3,149	1,006	6,676	5,954
Mean (SD)	3.5 (1.3)	3.5 (1.3)	3.0 (1.2)	3.5 (1.3)	3.4 (1.3)	3.0 (1.3)	3.7 (1.4)	3.4 (1.3)	3.0 (1.2)	3.6 (1.4)	3.4 (1.3)	3.0 (1.2)
Median (min, max)	3.4 (0.6, 12.0)	3.4 (0.5, 12.3)	2.9 (0.5, 10.9)	3.3 (0.8, 12.0)	3.3 (0.5, 11.4)	2.8 (0.5, 18.0)	3.6 (0.7, 9.7)	3.3 (0.5, 9.6)	2.8 (0.5, 13.0)	3.4 (0.7, 12.0)	3.3 (0.5, 11.4)	2.8 (0.5, 18.0)
IQR	1.5	1.7	1.6	1.6	1.6	1.6	1.5	1.7	1.7	1.6	1.7	1.6
Test not done (%)	168 (18.9)	1,500 (22.4)	1,723 (28.2)	85 (15.9)	785 (20.4)	851 (23.3)	89 (13.8)	708 (16.4)	868 (21.6)	174 (14.7)	1,493 (18.3)	1,719 (22.4)
Missing (%)	69 (7.2)	544 (7.5)	434 (6.6)	22 (3.9)	231 (5.7)	160 (4.2)	23 (3.4)	162 (3.6)	151 (3.6)	45 (3.7)	393 (4.6)	311 (3.9)

Year	2011 – 2013			2014			2015			2014 – 2015		
	Young	Middle-aged	Elderly	Young	Middle-aged	Elderly	Young	Middle-aged	Elderly	Young	Middle-aged	Elderly
ACS stratum												
Total	958 (6.5)	7,254 (49.1)	6,551 (44.4)	558 (6.6)	4,084 (48.3)	3,816 (45.1)	667 (7.2)	4,478 (48.1)	4,168 (44.8)	1,225 (6.9)	8,562 (48.2)	7,984 (44.9)
Triglycerides, mmol/L												
N	735	5,314	4,480	461	3,110	2,817	562	3,631	3,140	1,023	6,741	5,957
Mean (SD)	1.9 (1.2)	1.9 (1.2)	1.5 (0.9)	2.0 (1.4)	1.8 (1.2)	1.5 (0.8)	1.9 (1.3)	1.8 (1.1)	1.5 (0.8)	2.0 (1.3)	1.8 (1.1)	1.5 (0.8)
Median (min, max)	1.6 (0.5, 11.8)	1.6 (0.5, 15.0)	1.3 (0.5, 11.8)	1.6 (0.5, 12.9)	1.5 (0.5, 14.4)	1.3 (0.5, 11.4)	1.6 (0.5, 12.6)	1.5 (0.5, 13.9)	1.3 (0.5, 11.2)	1.6 (0.5, 12.9)	1.5 (0.5, 14.4)	1.3 (0.5, 11.4)
IQR	1.1	1.0	0.8	1.2	1.0	0.8	1.1	1.0	0.8	1.1	1.0	0.8
Test not done (%)	150 (16.9)	1,382 (20.6)	1,604 (26.4)	74 (13.8)	730 (19.0)	825 (22.7)	83 (12.9)	667 (15.5)	846 (21.2)	157 (13.3)	1,397 (17.2)	1,671 (21.9)
Missing (%)	73 (7.6)	558 (7.7)	467 (7.1)	23 (4.1)	244 (6.0)	174 (4.6)	22 (3.3)	180 (4.0)	182 (4.4)	45 (3.7)	424 (5.0)	356 (4.5)
* HbA1c, mmol/L												
		*only for 2013										
N	60	508	441	120	916	961	179	1,149	1,070	299	2,065	2,031
Mean (SD)	7.7 (2.7)	7.8 (2.6)	7.5 (2.7)	6.7 (2.4)	7.7 (2.5)	7.3 (2.6)	6.9 (3.5)	8.0 (2.7)	7.6 (2.9)	6.8 (3.1)	7.9 (2.6)	7.4 (2.8)
Median (min, max)	6.4 (4.5, 15.0)	6.9 (4.4, 32.0)	6.6 (4.2, 30.0)	5.7 (4.0, 16.5)	6.7 (4.1, 18.3)	6.4 (4.0, 32.0)	5.8 (4.5, 32.0)	7.2 (4.0, 32.0)	6.7 (4.1, 32.0)	5.8 (4.0, 32.0)	7.0 (4.0, 32.0)	6.6 (4.0, 32.0)
IQR	4.7	3.1	2.5	1.7	3.6	2.5	1.5	3.9	2.4	1.6	3.8	2.5
Test not done (%)	207 (77.5)	1,513 (74.9)	1,502 (77.3)	328 (73.2)	2,426 (72.6)	2,300 (70.5)	381 (68.0)	2,592 (69.3)	2,512 (70.1)	709 (70.3)	5,018 (70.8)	4,812 (70.3)
Missing (%)	140 (34.4)	1,023 (33.6)	733 (27.4)	110 (19.7)	742 (18.2)	555 (14.5)	107 (16.0)	737 (16.5)	586 (14.1)	217 (17.7)	1,479 (17.3)	1,141 (14.3)
Left ventricular ejection fraction, %												
N	476	3,374	2,865	297	2,156	1,861	365	2,578	2,173	662	4,734	4,034
Mean (SD)	48.3 (12.3)	47.1 (12.7)	45.9 (13.6)	47.8 (11.6)	46.9 (12.9)	46.1 (13.6)	48.4 (12.6)	47.0 (12.4)	46.0 (13.2)	48.1 (12.2)	47.0 (12.6)	46.1 (13.4)
Median (min, max)	50.0 (7.2, 88.0)	47.0 (6.3, 85.0)	45.0 (5.3, 89.0)	49.0 (12.0, 77.0)	47.0 (5.3, 90.0)	45.0 (5.1, 85.0)	49.0 (6.0, 90.0)	46.0 (5.3, 90.0)	45.0 (6.8, 87.0)	49.0 (6.0, 90.0)	46.0 (5.3, 90.0)	45.0 (5.1, 87.0)
IQR	15.0	15.0	20.0	15.0	16.0	19.6	15.0	15.0	18.0	15.0	15.0	19.0
Test not done (%)	341 (41.7)	2,784 (45.2)	2,810 (49.5)	215 (42.0)	1,606 (42.7)	1,682 (47.5)	263 (41.9)	1,628 (38.7)	1,753 (44.7)	478 (41.9)	3,234 (40.6)	3,435 (46.0)
Missing (%)	141 (14.7)	1,096 (15.1)	876 (13.4)	46 (8.2)	322 (7.9)	273 (7.2)	39 (5.8)	272 (6.1)	242 (5.8)	85 (6.9)	594 (6.9)	515 (6.5)

Year	2011 – 2013			2014			2015			2014 – 2015		
	Young	Middle-aged	Elderly	Young	Middle-aged	Elderly	Young	Middle-aged	Elderly	Young	Middle-aged	Elderly
ACS stratum												
Total	958 (6.5)	7,254 (49.1)	6,551 (44.4)	558 (6.6)	4,084 (48.3)	3,816 (45.1)	667 (7.2)	4,478 (48.1)	4,168 (44.8)	1,225 (6.9)	8,562 (48.2)	7,984 (44.9)
ECG, No. (%)												
Inferior leads	378 (39.5)	2,505 (34.5)	2,053 (31.3)	200 (35.8)	1,384 (33.9)	1,148 (30.1)	243 (36.4)	1,637 (36.6)	1,251 (30.0)	443 (36.2)	3,021 (35.3)	2,399 (30.0)
Anterior leads	428 (44.7)	3,111 (42.9)	2,644 (40.4)	252 (45.2)	1,680 (41.1)	1,537 (40.3)	289 (43.3)	1,728 (38.6)	1,597 (38.3)	541 (44.2)	3,408 (39.8)	3,134 (39.3)
Lateral leads	209 (21.8)	1,663 (22.9)	1,902 (29.0)	129 (23.1)	1,098 (26.9)	1,297 (34.0)	171 (25.6)	1,261 (28.2)	1,369 (32.8)	300 (24.5)	2,359 (27.6)	2,666 (33.4)
True posterior	57 (5.9)	341 (4.7)	259 (4.0)	27 (4.8)	176 (4.3)	144 (3.8)	48 (7.2)	193 (4.3)	162 (3.9)	75 (6.1)	369 (4.3)	306 (3.8)
Right ventricle	38 (4.0)	237 (3.3)	193 (2.9)	22 (3.9)	143 (3.5)	94 (2.5)	32 (4.8)	180 (4.0)	134 (3.2)	54 (4.4)	323 (3.8)	228 (2.9)
None	80 (8.4)	839 (11.6)	899 (13.7)	63 (11.3)	515 (12.6)	520 (13.6)	67 (10.0)	565 (12.6)	651 (15.6)	130 (10.6)	1,080 (12.6)	1,171 (14.7)
Not stated/ inadequately described	37 (3.9)	387 (5.3)	403 (6.2)	24 (4.3)	258 (6.3)	277 (7.3)	38 (5.7)	232 (5.2)	285 (6.8)	62 (5.1)	490 (5.7)	562 (7.0)
Total number of STEMI patients who were given fibrinolytic therapy at this centre	329 (34.3)	2,071 (28.5)	1,317 (20.1)	183 (32.8)	1,011 (24.8)	612 (16.0)	194 (29.1)	1,020 (22.8)	647 (15.5)	377 (30.8)	2,031 (23.7)	1,259 (15.8)
Pain-to-needle time, min (** symptom to treatment)												
N	248	1,618	974	161	856	498	165	889	518	326	1,745	1,016
Mean (SD)	288.4 (253.4)	283.4 (256.4)	295.7 (245.6)	291.3 (241.1)	290.6 (250.7)	306.0 (259.6)	290.4 (269.7)	277.6 (240.6)	290.6 (235.6)	290.8 (255.6)	284.0 (245.6)	298.1 (247.6)
Median (min, max)	207.5 (30.0, 1350.0)	195.0 (15.0, 1400.0)	212.0 (15.0, 1439.0)	220.0 (26.0, 1350.0)	215.0 (30.0, 1380.0)	220.0 (15.0, 1425.0)	190.0 (45.0, 1440.0)	195.0 (20.0, 1430.0)	215.0 (15.0, 1302.0)	200.0 (26.0, 1440.0)	200.0 (20.0, 1430.0)	220.0 (15.0, 1425.0)
IQR	230.0	210.0	235.0	210.0	220.0	215.0	205.0	210.0	230.0	225.0	215.0	220.0
Missing (%)	81 (24.6)	453 (21.9)	343 (26.0)	22 (12.0)	155 (15.3)	114 (18.6)	29 (14.9)	131 (12.8)	129 (19.9)	51 (13.5)	286 (14.1)	243 (19.3)
Pain-to-needle time, No (%)												
≤ 180 min	115 (46.4)	764 (47.2)	404 (41.5)	65 (40.4)	362 (42.3)	198 (39.8)	79 (47.9)	409 (46.0)	211 (40.7)	144 (44.2)	771 (44.2)	409 (40.3)
> 180 min	133 (53.6)	854 (52.8)	570 (58.5)	96 (59.6)	494 (57.7)	300 (60.2)	86 (52.1)	480 (54.0)	307 (59.3)	182 (55.8)	974 (55.8)	607 (59.7)
Missing	81	453	343	22	155	114	29	131	129	51	286	243

Young is defined as age 20 to less than 40 years, middle-aged is defined as age 40 to less than 60 years, and elderly is defined as 60 years and above

* Definition was different in CRF version 2013

** Symptom to treatment is the time difference between onset of ACS symptom and when patient was given fibrinolytic therapy

Note: Percentage is to the nearest decimal point

Table 3.3 Cardiac presentation of patients with ACS by gender, NCVd-ACS Registry, 2014 – 2015

Year	2011 – 2013		2014		2015		2014 – 2015	
	Male	Female	Male	Female	Male	Female	Male	Female
ACS stratum								
Total	11,638 (78.8)	3,125 (21.2)	6,705 (79.3)	1,753 (20.7)	7,384 (79.3)	1,929 (20.7)	14,089 (79.3)	3,682 (20.7)
ACS stratum, No. (%)								
STEMI	6,397 (55.0)	1,105 (35.4)	3,384 (50.5)	502 (28.6)	3,733 (50.6)	571 (29.6)	7,117 (50.5)	1,073 (29.1)
NSTEMI	2,882 (24.8)	960 (30.7)	1,554 (23.2)	495 (28.2)	1,856 (25.1)	574 (29.8)	3,410 (24.2)	1,069 (29.0)
UA	2,359 (20.3)	1,060 (33.9)	1,767 (26.4)	756 (43.1)	1,795 (24.3)	784 (40.6)	3,562 (25.3)	1,540 (41.8)
Systolic blood pressure, mmHg								
N	11,065	2,909	6,587	1,727	7,245	1,896	13,832	3,623
Mean (SD)	135.6 (28.3)	143.1 (31.9)	137.9 (28.6)	143.9 (31.1)	137.3 (27.9)	143.0 (29.8)	137.5 (28.2)	143.5 (30.4)
Median (min, max)	133.0 (50.0, 268.0)	140.0 (57.0, 270.0)	136.0 (54.0, 269.0)	141.0 (50.0, 269.0)	135.0 (54.0, 264.0)	140.0 (50.0, 254.0)	135.0 (54.0, 269.0)	141.0 (50.0, 269.0)
IQR	36.0	41.0	36.0	40.0	34.0	37.0	35.0	38.0
Missing (%)	573 (4.9)	216 (6.9)	118 (1.8)	26 (1.5)	139 (1.9)	33 (1.7)	257 (1.8)	59 (1.6)
Diastolic blood pressure, mmHg								
N	11,039	2,904	6,585	1,726	7,243	1,896	13,828	3,622
Mean (SD)	80.9 (18.1)	79.3 (18.4)	82.2 (18.3)	78.7 (18.2)	81.5 (17.4)	78.7 (17.2)	81.8 (17.9)	78.7 (17.7)
Median (min, max)	80.0 (10.0, 170.0)	78.0 (11.0, 170.0)	81.0 (21.0, 165.0)	78.0 (10.0, 167.0)	80.0 (20.0, 159.0)	78.0 (27.0, 170.0)	80.0 (20.0, 165.0)	78.0 (10.0, 170.0)
IQR	22.0	22.0	23.0	23.0	21.0	21.0	22.0	22.0
Missing (%)	599 (5.1)	221 (7.1)	120 (1.8)	27 (1.5)	141 (1.9)	33 (1.7)	261 (1.9)	60 (1.6)
Pulse pressure, mmHg								
N	10,784	2,706	6,396	1,592	7,067	1,758	13,463	3,350
Mean (SD)	53.5 (17.0)	60.1 (19.3)	54.3 (17.1)	61.0 (19.1)	54.5 (17.3)	60.6 (18.9)	54.4 (17.2)	60.8 (19.0)
Median (min, max)	51.0 (1.0, 100.0)	60.0 (8.0, 100.0)	52.0 (2.0, 100.0)	60.0 (8.0, 100.0)	53.0 (6.0, 100.0)	60.0 (2.0, 100.0)	53.0 (2.0, 100.0)	60.0 (2.0, 100.0)
IQR	23.0	28.0	23.0	30.0	23.0	28.0	23.0	28.0
Missing (%)	854 (7.3)	419 (13.4)	309 (4.6)	161 (9.2)	317 (4.3)	171 (8.9)	626 (4.4)	332 (9.0)

Year	2011 – 2013		2014		2015		2014 – 2015	
	Male	Female	Male	Female	Male	Female	Male	Female
ACS stratum								
Total	11,638 (78.8)	3,125 (21.2)	6,705 (79.3)	1,753 (20.7)	7,384 (79.3)	1,929 (20.7)	14,089 (79.3)	3,682 (20.7)
Heart rate at presentation, beats/min								
N	10,997	2,893	6,517	1,705	7,210	1,887	13,727	3,592
Mean (SD)	82.7 (20.8)	86.0 (21.6)	83.1 (21.1)	86.5 (22.6)	82.1 (20.7)	85.0 (21.0)	82.6 (20.9)	85.7 (21.8)
Median (min, max)	80.0 (20.0, 198.0)	84.0 (30.0, 200.0)	80.0 (24.0, 200.0)	84.0 (29.0, 200.0)	80.0 (20.0, 198.0)	82.0 (28.0, 195.0)	80.0 (20.0, 200.0)	83.0 (28.0, 200.0)
IQR	27.0	29.0	27.0	30.0	26.0	28.0	26.0	28.5
Missing (%)	641 (5.5)	232 (7.4)	188 (2.8)	48 (2.7)	174 (2.4)	42 (2.2)	362 (2.6)	90 (2.4)
Episodes of angina in past 24 hours, No. (%)								
0 – 2	4,714 (44.8)	1,067 (38.5)	2,848 (45.7)	649 (39.4)	3,878 (55.0)	955 (52.2)	6,726 (50.6)	1,604 (46.1)
> 2	341 (3.2)	91 (3.3)	194 (3.1)	56 (3.4)	315 (4.5)	111 (6.1)	509 (3.8)	167 (4.8)
Not available	5,456 (51.9)	1,616 (58.3)	3,185 (51.1)	943 (57.2)	2,861 (40.6)	762 (41.7)	6,046 (45.5)	1,705 (49.1)
Missing (%)	1,127	351	478	105	330	101	808	206
Killip classification code, No. (%)								
I	5,402 (55.4)	1,282 (52.0)	3,782 (68.5)	872 (65.2)	4,131 (55.9)	876 (45.4)	7,913 (69.3)	1,748 (65.5)
II	1,596 (16.4)	404 (16.4)	908 (16.4)	253 (18.9)	894 (12.1)	194 (10.1)	1,802 (15.8)	447 (16.7)
III	388 (4.0)	121 (4.9)	252 (4.6)	92 (6.9)	279 (3.8)	109 (5.7)	531 (4.7)	201 (7.5)
IV	898 (9.2)	221 (9.0)	577 (10.4)	120 (9.0)	587 (7.9)	154 (8.0)	1,164 (10.2)	274 (10.3)
Not stated/ inadequately described	1,461 (15.0)	439 (17.8)	3 (0.1)	0 (0.0)	1,493 (20.2)	596 (30.9)	3 (0.0)	0 (0.0)
Not available	1,141	400	1,182	416	0	0	2,675	1,012
Missing	752	258	1	0	0	0	1	0
Total cholesterol, mmol/L								
N	8,516	2,092	5,114	1,302	5,899	1,452	11,013	2,754
Mean (SD)	5.1 (1.4)	5.1 (1.6)	5.1 (1.4)	5.0 (1.5)	5.0 (1.4)	5.1 (1.5)	5.1 (1.4)	5.0 (1.5)
Median (min, max)	5.0 (2.0, 14.1)	4.9 (2.0, 17.0)	5.0 (2.0, 22.0)	4.9 (2.0, 16.6)	5.0 (2.0, 17.7)	4.9 (2.0, 14.9)	5.0 (2.0, 22.0)	4.9 (2.0, 16.6)
IQR	1.8	1.9	1.9	1.8	1.9	1.9	1.9	1.8
Test not done (%)	2,289 (21.2)	783 (27.2)	1,234 (19.4)	371 (22.2)	1,193 (16.8)	399 (21.6)	2,427 (18.1)	770 (21.9)
Missing (%)	833 (7.2)	250 (8.0)	357 (5.3)	80 (4.6)	292 (4.0)	78 (4.0)	649 (4.6)	158 (4.3)

Year	2011 – 2013		2014		2015		2014 – 2015	
	Male	Female	Male	Female	Male	Female	Male	Female
ACS stratum								
Total	11,638 (78.8)	3,125 (21.2)	6,705 (79.3)	1,753 (20.7)	7,384 (79.3)	1,929 (20.7)	14,089 (79.3)	3,682 (20.7)
HDL-C, mmol/L								
N	8,255	2,024	5,012	1,280	5,846	1,441	10,858	2,721
Mean (SD)	1.1 (0.3)	1.2 (0.4)	1.1 (0.3)	1.2 (0.3)	1.1 (0.3)	1.2 (0.4)	1.1 (0.3)	1.2 (0.4)
Median (min, max)	1.0 (0.5, 4.9)	1.1 (0.5, 4.6)	1.0 (0.5, 4.7)	1.1 (0.5, 3.1)	1.0 (0.5, 4.9)	1.1 (0.5, 4.6)	1.0 (0.5, 4.9)	1.1 (0.5, 4.6)
IQR	0.3	0.5	0.3	0.5	0.3	0.4	0.3	0.4
Test not done (%)	2,468 (23.0)	816 (28.7)	1,266 (20.2)	377 (22.8)	1,208 (17.1)	403 (21.9)	2,474 (18.6)	780 (22.3)
Missing (%)	915 (7.9)	285 (9.1)	427 (6.4)	96 (5.5)	330 (4.5)	85 (4.4)	757 (5.4)	181 (4.9)
LDL-C, mmol/L								
N	8,293	2,032	5,036	1,288	5,868	1,444	10,904	2,732
Mean (SD)	3.3 (1.3)	3.1 (1.4)	3.2 (1.3)	3.1 (1.3)	3.2 (1.3)	3.1 (1.3)	3.2 (1.3)	3.1 (1.3)
Median (min, max)	3.2 (0.5, 12.2)	3.0 (0.6, 12.3)	3.1 (0.5, 18.0)	2.9 (0.5, 14.8)	3.2 (0.5, 9.8)	3.0 (0.5, 13.0)	3.2 (0.5, 18.0)	3.0 (0.5, 14.8)
IQR	1.7	1.7	1.7	1.6	1.7	1.6	1.7	1.6
Test not done (%)	2,542 (23.5)	849 (29.5)	1,332 (20.9)	389 (23.2)	1,251 (17.6)	414 (22.3)	2,583 (19.2)	803 (22.7)
Missing (%)	803 (6.9)	244 (7.8)	337 (5.0)	76 (4.3)	265 (3.6)	71 (3.7)	602 (4.3)	147 (4.0)
Triglycerides, mmol/L								
N	8,475	2,054	5,085	1,303	5,888	1,445	10,973	2,748
Mean (SD)	1.7 (1.1)	1.7 (1.0)	1.7 (1.1)	1.7 (0.9)	1.7 (1.1)	1.7 (0.9)	1.7 (1.1)	1.7 (0.9)
Median (min, max)	1.5 (0.5, 15.0)	1.4 (0.5, 12.0)	1.4 (0.5, 14.4)	1.5 (0.5, 13.3)	1.4 (0.5, 13.9)	1.5 (0.5, 9.2)	1.4 (0.5, 14.4)	1.5 (0.5, 13.3)
IQR	1.0	0.8	0.9	0.9	0.9	0.9	0.9	0.9
Test not done (%)	2,334 (21.6)	802 (28.1)	1,254 (19.8)	375 (22.3)	1,196 (16.9)	400 (21.7)	2,450 (18.3)	775 (22.0)
Missing (%)	829 (7.1)	269 (8.6)	366 (5.5)	75 (4.3)	300 (4.1)	84 (4.4)	666 (4.7)	159 (4.3)

Year	2011 – 2013		2014		2015		2014 – 2015	
	Male	Female	Male	Female	Male	Female	Male	Female
ACS stratum								
Total	11,638 (78.8)	3,125 (21.2)	6,705 (79.3)	1,753 (20.7)	7,384 (79.3)	1,929 (20.7)	14,089 (79.3)	3,682 (20.7)
* HbA1c, mmol/L	<i>*only for 2013</i>							
N	794	215	1,533	464	1,860	538	3,393	1,002
Mean (SD)	7.5 (2.7)	8.0 (2.4)	7.3 (2.5)	7.8 (2.7)	7.6 (2.7)	8.2 (3.3)	7.5 (2.6)	8.0 (3.0)
Median (min, max)	6.5 (4.2, 32.0)	7.5 (4.5, 15.3)	6.4 (4.0, 32.0)	6.9 (4.1, 31.0)	6.6 (4.0, 32.0)	7.4 (4.0, 32.0)	6.5 (4.0, 32.0)	7.1 (4.0, 32.0)
IQR	2.9	3.3	2.8	3.3	2.9	3.7	2.9	3.5
Test not done (%)	2,543 (76.2)	679 (76.0)	4,010 (72.3)	1,044 (69.2)	4,376 (70.2)	1,109 (67.3)	8,386 (71.2)	2,153 (68.2)
Missing (%)	1,528 (31.4)	368 (29.2)	1,162 (17.3)	245 (14.0)	1,148 (15.5)	282 (14.6)	2,310 (16.4)	527 (14.3)
Left ventricular ejection fraction, %								
N	5,451	1,264	3,524	790	4,198	918	7,722	1,708
Mean (SD)	46.2 (12.9)	48.8 (13.6)	46.1 (12.9)	49.0 (13.7)	46.3 (12.7)	48.4 (13.2)	46.2 (12.8)	48.7 (13.5)
Median (min, max)	46.0 (5.3, 89.0)	50.0 (6.6, 87.0)	45.0 (5.1, 90.0)	50.0 (5.5, 85.0)	45.0 (5.3, 90.0)	48.0 (6.8, 90.0)	45.0 (5.1, 90.0)	50.0 (5.5, 90.0)
IQR	17.0	18.0	18.0	18.0	15.0	15.0	17.0	17.0
Test not done (%)	4,537 (45.4)	1,398 (52.5)	2,656 (43.0)	847 (51.7)	2,769 (39.7)	875 (48.8)	5,425 (41.3)	1,722 (50.2)
Missing (%)	1,650 (14.2)	463 (14.8)	525 (7.8)	116 (6.6)	417 (5.6)	136 (7.1)	942 (6.7)	252 (6.8)
ECG, No. (%)								
Inferior leads	4,004 (34.4)	932 (29.8)	2,219 (33.1)	513 (29.3)	2,560 (34.7)	571 (29.6)	4,779 (33.9)	1,084 (29.4)
Anterior leads	4,953 (42.6)	1,230 (39.4)	2,766 (41.3)	703 (40.1)	2,899 (39.3)	715 (37.1)	5,665 (40.2)	1,418 (38.5)
Lateral leads	2,864 (24.6)	910 (29.1)	1,881 (28.1)	643 (36.7)	2,150 (29.1)	651 (33.7)	4,031 (28.6)	1,294 (35.1)
True posterior	554 (4.8)	103 (3.3)	295 (4.4)	52 (3.0)	327 (4.4)	76 (3.9)	622 (4.4)	128 (3.5)
Right ventricle	393 (3.4)	75 (2.4)	221 (3.3)	38 (2.2)	298 (4.0)	48 (2.5)	519 (3.7)	86 (2.3)
None	1,353 (11.6)	465 (14.9)	829 (12.4)	269 (15.3)	954 (12.9)	329 (17.1)	1,783 (12.7)	598 (16.2)
Not stated/ inadequately described	606 (5.2)	221 (7.1)	440 (6.6)	119 (6.8)	416 (5.6)	139 (7.2)	856 (6.1)	258 (7.0)

Year	2011 – 2013		2014		2015		2014 – 2015	
	Male	Female	Male	Female	Male	Female	Male	Female
ACS stratum								
Total	11,638 (78.8)	3,125 (21.2)	6,705 (79.3)	1,753 (20.7)	7,384 (79.3)	1,929 (20.7)	14,089 (79.3)	3,682 (20.7)
Total number of STEMI patients who were given fibrinolytic therapy at this centre	3,187 (27.4)	530 (17.0)	1,588 (23.7)	218 (12.4)	1,648 (22.3)	213 (11.0)	3,236 (23.0)	431 (11.7)
Pain-to-needle time, min (** symptom to treatment)								
N	2,460	380	1,338	177	1,398	174	2,736	351
Mean (SD)	281.7 (252.3)	328.9 (249.8)	287.8 (250.4)	355.3 (261.3)	281.8 (243.7)	294.7 (228.9)	284.8 (247.0)	325.3 (247.3)
Median (min, max)	197.5 (15.0, 1439.0)	250.0 (15.0, 1205.0)	210.0 (26.0, 1425.0)	290.0 (15.0, 1380.0)	199.0 (15.0, 1440.0)	232.5 (30.0, 1320.0)	202.5 (15.0, 1440.0)	260.0 (15.0, 1380.0)
IQR	215.0	272.5	210.0	261.0	220.0	195.0	215.0	240.0
Missing (%)	727 (22.8)	150 (28.3)	250 (15.7)	41 (18.8)	250 (15.2)	39 (18.3)	500 (15.5)	80 (18.6)
Pain-to-needle time, No (%)								
≤ 180 min	1,151 (46.8)	132 (34.7)	575 (43.0)	50 (28.2)	638 (45.6)	61 (35.1)	1,213 (44.3)	111 (31.6)
> 180 min	1,309 (53.2)	248 (65.3)	763 (57.0)	127 (71.8)	760 (54.4)	113 (64.9)	1,523 (55.7)	240 (68.4)
Missing	727	150	250	41	250	39	500	80

* Definition was different in CRF version 2013

** Symptom to treatment is the time difference between onset of ACS symptom and when patient was given fibrinolytic therapy

Note: Not all participating centres performed Troponin T or Troponin I tests

Note: Percentage is to the nearest decimal point

Table 3.4 Cardiac presentation of patients with ACS by pre-morbid diabetes, NCVd-ACS Registry, 2014 – 2015

Year	2011 – 2013			2014			2015			2014 – 2015		
	Diabetic	Non-diabetic	Unknown	Diabetic	Non-diabetic	Unknown	Diabetic	Non-diabetic	Unknown	Diabetic	Non-diabetic	Unknown
Diabetes status												
Total	6,284 (42.6)	6,638 (45.0)	792 (5.4)	3,687 (43.6)	3,736 (44.2)	457 (5.4)	3,991 (42.9)	4,202 (45.1)	497 (5.3)	7,678 (43.2)	7,938 (44.7)	954 (5.4)
ACS stratum, No. (%)												
STEMI	2,668 (42.5)	3,578 (53.9)	536 (67.7)	1,419 (38.5)	1,842 (49.3)	308 (67.4)	1,496 (37.5)	2,110 (50.2)	365 (73.4)	2,915 (38.0)	3,952 (49.8)	673 (70.5)
NSTEMI	1,930 (30.7)	1,596 (24.0)	127 (16.0)	1,007 (27.3)	868 (23.2)	91 (19.9)	1,227 (30.7)	1,008 (24.0)	89 (17.9)	2,234 (29.1)	1,876 (23.6)	180 (18.9)
UA	1,686 (26.8)	1,464 (22.1)	129 (16.3)	1,261 (34.2)	1,026 (27.5)	58 (12.7)	1,268 (31.8)	1,084 (25.8)	43 (8.7)	2,529 (32.9)	2,110 (26.6)	101 (10.6)
Systolic blood pressure, mmHg												
N	6,003	6,199	780	3,623	3,673	445	3,920	4,137	481	7,543	7,810	926
Mean (SD)	139.8 (29.5)	135.6 (28.8)	135.4 (31.4)	141.3 (29.3)	138.1 (29.2)	135.4 (28.7)	140.6 (28.8)	137.3 (27.8)	135.6 (29.2)	140.9 (29.1)	137.7 (28.5)	135.5 (29.0)
Median (min, max)	138.0 (52.0, 270.0)	133.0 (50.0, 270.0)	132.5 (61.0, 245.0)	140.0 (56.0, 266.0)	135.0 (50.0, 269.0)	134.0 (54.0, 236.0)	138.0 (55.0, 264.0)	135.0 (50.0, 260.0)	134.0 (54.0, 240.0)	139.0 (55.0, 266.0)	135.0 (50.0, 269.0)	134.0 (54.0, 240.0)
IQR	38.0	37.0	38.0	38.0	37.0	33.0	36.0	35.0	33.0	37.0	36.0	32.0
Missing (%)	281 (4.5)	439 (6.6)	12 (1.5)	64 (1.7)	63 (1.7)	12 (2.6)	71 (1.8)	65 (1.5)	16 (3.2)	135 (1.8)	128 (1.6)	28 (2.9)
Diastolic blood pressure, mmHg												
N	5,991	6,182	780	3,621	3,670	447	3,922	4,135	481	7,543	7,805	928
Mean (SD)	80.3 (17.8)	80.9 (18.5)	80.7 (19.7)	80.8 (17.8)	82.3 (18.8)	82.2 (20.0)	79.9 (17.0)	81.8 (17.7)	82.5 (18.3)	80.3 (17.4)	82.0 (18.2)	82.4 (19.1)
Median (min, max)	80.0 (10.0, 170.0)	80.0 (10.0, 170.0)	80.0 (10.0, 160.0)	80.0 (25.0, 167.0)	81.0 (20.0, 163.0)	80.0 (21.0, 165.0)	79.0 (20.0, 170.0)	80.0 (23.0, 153.0)	82.0 (24.0, 159.0)	79.0 (20.0, 170.0)	80.0 (20.0, 163.0)	81.0 (21.0, 165.0)
IQR	21.0	23.0	24.0	22.0	23.0	24.0	21.0	22.0	22.0	21.0	22.0	23.0
Missing (%)	293 (4.7)	456 (6.9)	12 (1.5)	66 (1.8)	66 (1.8)	10 (2.2)	69 (1.7)	67 (1.6)	16 (3.2)	135 (1.8)	133 (1.7)	26 (2.7)

* Definition was different in CRF version 2013

** Symptom to treatment is the time difference between onset of ACS symptom and when patient was given fibrinolytic therapy

Note: Not all participating centres performed Troponin T or Troponin I tests

Note: Percentage is to the nearest decimal point

Year	2011 – 2013			2014			2015			2014 – 2015		
	Diabetic	Non-diabetic	Unknown	Diabetic	Non-diabetic	Unknown	Diabetic	Non-diabetic	Unknown	Diabetic	Non-diabetic	Unknown
Diabetes status												
Total	6,284 (42.6)	6,638 (45.0)	792 (5.4)	3,687 (43.6)	3,736 (44.2)	457 (5.4)	3,991 (42.9)	4,202 (45.1)	497 (5.3)	7,678 (43.2)	7,938 (44.7)	954 (5.4)
Pulse pressure, mmHg												
N	5,732	6,035	749	3,436	3,559	438	3,729	4,031	474	7,165	7,590	912
Mean (SD)	57.1 (18.0)	53.6 (17.3)	53.0 (17.8)	57.8 (18.4)	54.3 (17.0)	52.6 (17.3)	58.2 (18.6)	54.3 (16.9)	52.3 (16.8)	58.0 (18.5)	54.3 (16.9)	52.4 (17.0)
Median (min, max)	55.0 (5.0, 100.0)	51.0 (1.0, 100.0)	50.0 (1.0, 100.0)	57.0 (2.0, 100.0)	52.0 (6.0, 100.0)	50.0 (3.0, 100.0)	57.0 (2.0, 100.0)	53.0 (6.0, 100.0)	50.5 (6.0, 98.0)	57.0 (2.0, 100.0)	52.0 (6.0, 100.0)	50.0 (3.0, 100.0)
IQR	25.0	24.0	24.0	27.0	23.0	24.0	27.0	23.0	21.0	27.0	23.0	23.0
Missing (%)	552 (8.8)	603 (9.1)	43 (5.4)	251 (6.8)	177 (4.7)	19 (4.2)	262 (6.6)	171 (4.1)	23 (4.6)	513 (6.7)	348 (4.4)	42 (4.4)
Heart rate at presentation, beats/min												
N	5,982	6,154	772	3,584	3,637	434	3,901	4,118	476	7,485	7,755	910
Mean (SD)	86.2 (20.8)	81.0 (20.7)	83.1 (23.0)	86.6 (21.7)	81.9 (21.3)	82.5 (20.5)	85.3 (21.2)	80.9 (20.3)	81.8 (21.6)	85.9 (21.4)	81.4 (20.8)	82.1 (21.1)
Median (min, max)	85.0 (25.0, 195.0)	79.0 (20.0, 200.0)	80.0 (34.0, 198.0)	84.0 (24.0, 200.0)	79.0 (29.0, 200.0)	80.0 (38.0, 190.0)	83.0 (20.0, 195.0)	78.0 (25.0, 198.0)	79.0 (30.0, 192.0)	83.0 (20.0, 200.0)	79.0 (25.0, 200.0)	80.0 (30.0, 192.0)
IQR	27.0	26.0	26.5	28.0	26.0	25.0	28.0	25.0	25.0	27.0	25.0	25.0
Missing (%)	302 (4.8)	484 (7.3)	20 (2.5)	103 (2.8)	99 (2.6)	23 (5.0)	90 (2.3)	84 (2.0)	21 (4.2)	193 (2.5)	183 (2.3)	44 (4.6)
Episodes of angina in past 24 hours, No. (%)												
0 – 2	2,253 (40.1)	2,809 (46.3)	261 (34.8)	1,418 (41.7)	1,601 (45.7)	181 (42.0)	1,995 (52.6)	2,201 (54.6)	271 (56.2)	3,413 (47.5)	3,802 (50.5)	452 (49.5)
> 2	202 (3.6)	184 (3.0)	23 (3.1)	100 (2.9)	115 (3.3)	6 (1.4)	208 (5.5)	148 (3.7)	9 (1.9)	308 (4.3)	263 (3.5)	15 (1.6)
Not available	3,169 (56.3)	3,071 (50.6)	466 (62.1)	1,884 (55.4)	1,790 (51.1)	244 (56.6)	1,587 (41.9)	1,679 (41.7)	202 (41.9)	3,471 (48.3)	3,469 (46.0)	446 (48.8)
Missing (%)	660	574	42	285	230	26	201	174	15	486	404	41

* Definition was different in CRF version 2013

** Symptom to treatment is the time difference between onset of ACS symptom and when patient was given fibrinolytic therapy

Note: Not all participating centres performed Troponin T or Troponin I tests

Note: Percentage is to the nearest decimal point

Year	2011 – 2013			2014			2015			2014 – 2015		
	Diabetic	Non-diabetic	Unknown	Diabetic	Non-diabetic	Unknown	Diabetic	Non-diabetic	Unknown	Diabetic	Non-diabetic	Unknown
Diabetes status												
Total	6,284 (42.6)	6,638 (45.0)	792 (5.4)	3,687 (43.6)	3,736 (44.2)	457 (5.4)	3,991 (42.9)	4,202 (45.1)	497 (5.3)	7,678 (43.2)	7,938 (44.7)	954 (5.4)
Killip classification code, No. (%)												
I	2,503 (49.4)	3,330 (59.3)	347 (51.0)	1,817 (63.1)	2,256 (72.2)	253 (62.5)	1,887 (47.3)	2,438 (58.0)	267 (53.7)	3,704 (63.9)	4,694 (72.7)	520 (62.1)
II	923 (18.2)	831 (14.8)	112 (16.5)	571 (19.8)	449 (14.4)	77 (19.0)	492 (12.3)	450 (10.7)	84 (16.9)	1,063 (18.3)	899 (13.9)	161 (19.2)
III	272 (5.4)	184 (3.3)	25 (3.7)	189 (6.6)	124 (4.0)	20 (4.9)	225 (5.6)	130 (3.1)	17 (3.4)	414 (7.1)	254 (3.9)	37 (4.4)
IV	491 (9.7)	426 (7.6)	102 (15.0)	300 (10.4)	294 (9.4)	55 (13.6)	318 (8.0)	315 (7.5)	64 (12.9)	618 (10.7)	609 (9.4)	119 (14.2)
Not stated/ inadequately described	881 (17.4)	843 (15.0)	94 (13.8)	1 (0.0)	2 (0.1)	0 (0.0)	1,069 (26.8)	869 (20.7)	65 (13.1)	1 (0.0)	2 (0.0)	0 (0.0)
Not available	765	643	64	808	611	52	0	0	0	1,877	1,480	117
Missing	449	381	48	1	0	0	0	0	0	1	0	0
Total cholesterol, mmol/L												
N	4,322	4,862	600	2,748	2,832	344	3,080	3,365	382	5,828	6,197	726
Mean (SD)	4.9 (1.5)	5.2 (1.4)	5.4 (1.4)	4.8 (1.4)	5.2 (1.4)	5.5 (1.4)	4.9 (1.5)	5.1 (1.3)	5.6 (1.5)	4.9 (1.5)	5.1 (1.4)	5.6 (1.4)
Median (min, max)	4.8 (2.0, 17.0)	5.1 (2.0, 16.9)	5.4 (2.3, 12.1)	4.7 (2.0, 14.4)	5.1 (2.0, 22.0)	5.4 (2.2, 11.0)	4.7 (2.0, 15.5)	5.0 (2.0, 11.8)	5.6 (2.0, 9.9)	4.7 (2.0, 15.5)	5.1 (2.0, 22.0)	5.5 (2.0, 11.0)
IQR	1.9	1.8	1.9	1.8	1.8	2.1	2.0	1.7	2.0	1.9	1.8	2.0
Test not done (%)	1,502 (25.8)	1,299 (21.1)	126 (17.4)	759 (21.6)	701 (19.8)	78 (18.5)	759 (19.8)	685 (16.9)	94 (19.7)	1,518 (20.7)	1,386 (18.3)	172 (19.2)
Missing (%)	460 (7.3)	477 (7.2)	66 (8.3)	180 (4.9)	203 (5.4)	35 (7.7)	152 (3.8)	152 (3.6)	21 (4.2)	332 (4.3)	355 (4.5)	56 (5.9)
HDL-C, mmol/L												
N	4,180	4,744	568	2,697	2,784	336	3,054	3,333	379	5,751	6,117	715
Mean (SD)	1.1 (0.4)	1.1 (0.4)	1.1 (0.3)	1.1 (0.3)	1.1 (0.3)	1.1 (0.3)	1.1 (0.3)	1.1 (0.4)	1.1 (0.3)	1.1 (0.3)	1.1 (0.3)	1.1 (0.3)
Median (min, max)	1.0 (0.5, 4.6)	1.1 (0.5, 4.9)	1.0 (0.5, 4.1)	1.0 (0.5, 3.8)	1.1 (0.5, 4.7)	1.1 (0.6, 2.3)	1.0 (0.5, 4.6)	1.0 (0.5, 4.9)	1.0 (0.5, 4.1)	1.0 (0.5, 4.6)	1.0 (0.5, 4.9)	1.1 (0.5, 4.1)
IQR	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.3
Test not done (%)	1,578 (27.4)	1,378 (22.5)	153 (21.2)	771 (22.2)	714 (20.4)	80 (19.2)	761 (19.9)	699 (17.3)	95 (20.0)	1,532 (21.0)	1,413 (18.8)	175 (19.7)
Missing (%)	526 (8.4)	516 (7.8)	71 (9.0)	219 (5.9)	238 (6.4)	41 (9.0)	176 (4.4)	170 (4.0)	23 (4.6)	395 (5.1)	408 (5.1)	64 (6.7)

Year	2011 – 2013			2014			2015			2014 – 2015		
	Diabetic	Non-diabetic	Unknown	Diabetic	Non-diabetic	Unknown	Diabetic	Non-diabetic	Unknown	Diabetic	Non-diabetic	Unknown
Diabetes status												
Total	6,284 (42.6)	6,638 (45.0)	792 (5.4)	3,687 (43.6)	3,736 (44.2)	457 (5.4)	3,991 (42.9)	4,202 (45.1)	497 (5.3)	7,678 (43.2)	7,938 (44.7)	954 (5.4)
LDL-C, mmol/L												
N	4,211	4,758	566	2,704	2,800	340	3,063	3,349	379	5,767	6,149	719
Mean (SD)	3.1 (1.3)	3.4 (1.3)	3.6 (1.3)	3.0 (1.3)	3.3 (1.3)	3.7 (1.3)	3.0 (1.3)	3.3 (1.2)	3.8 (1.3)	3.0 (1.3)	3.3 (1.3)	3.7 (1.3)
Median (min, max)	2.9 (0.5, 12.3)	3.3 (0.5, 12.0)	3.5 (0.7, 10.1)	2.8 (0.5, 11.4)	3.3 (0.5, 18.0)	3.6 (0.9, 8.9)	2.8 (0.5, 13.0)	3.2 (0.5, 9.7)	3.7 (0.9, 9.1)	2.8 (0.5, 13.0)	3.3 (0.5, 18.0)	3.7 (0.9, 9.1)
IQR	1.7	1.6	1.8	1.6	1.7	1.9	1.8	1.6	1.7	1.7	1.6	1.8
Test not done (%)	1,625 (27.8)	1,417 (22.9)	164 (22.5)	808 (23.0)	749 (21.1)	82 (19.4)	793 (20.6)	714 (17.6)	101 (21.0)	1,601 (21.7)	1,463 (19.2)	183 (20.3)
Missing (%)	448 (7.1)	463 (7.0)	62 (7.8)	175 (4.7)	187 (5.0)	35 (7.7)	135 (3.4)	139 (3.3)	17 (3.4)	310 (4.0)	326 (4.1)	52 (5.5)
Triglycerides, mmol/L												
N	4,299	4,818	589	2,749	2,809	338	3,075	3,357	384	5,824	6,166	722
Mean (SD)	1.8 (1.2)	1.7 (1.0)	1.7 (1.0)	1.8 (1.1)	1.6 (1.0)	1.6 (1.1)	1.8 (1.1)	1.6 (1.0)	1.8 (1.1)	1.8 (1.1)	1.6 (1.0)	1.7 (1.1)
Median (min, max)	1.5 (0.5, 15.0)	1.4 (0.5, 15.0)	1.4 (0.5, 10.5)	1.5 (0.5, 14.4)	1.4 (0.5, 13.1)	1.4 (0.5, 12.2)	1.5 (0.5, 13.9)	1.4 (0.5, 12.6)	1.5 (0.5, 9.0)	1.5 (0.5, 14.4)	1.4 (0.5, 13.1)	1.4 (0.5, 12.2)
IQR	1.0	0.9	0.9	1.0	0.9	0.9	1.0	0.9	1.0	1.0	0.9	0.9
Test not done (%)	1,525 (26.2)	1,326 (21.6)	135 (18.6)	765 (21.8)	715 (20.3)	80 (19.1)	762 (19.9)	685 (16.9)	91 (19.2)	1,527 (20.8)	1,400 (18.5)	171 (19.1)
Missing (%)	460 (7.3)	494 (7.4)	68 (8.6)	173 (4.7)	212 (5.7)	39 (8.5)	154 (3.9)	160 (3.8)	22 (4.4)	327 (4.3)	372 (4.7)	61 (6.4)
* HbA1c, mmol/L												
N	570	308	52	1,086	717	49	1,251	872	121	2,337	1,589	170
Mean (SD)	8.6 (2.3)	6.4 (2.5)	6.7 (3.6)	8.4 (2.3)	6.2 (2.5)	6.4 (1.5)	8.9 (2.6)	6.4 (2.5)	6.7 (2.1)	8.7 (2.5)	6.3 (2.5)	6.6 (2.0)
Median (min, max)	8.2 (4.8, 16.5)	5.8 (4.2, 32.0)	5.8 (4.9, 30.0)	8.0 (4.0, 19.5)	5.8 (4.0, 32.0)	6.0 (4.9, 13.6)	8.3 (4.4, 32.0)	5.9 (4.1, 32.0)	5.9 (4.0, 14.1)	8.2 (4.0, 32.0)	5.8 (4.0, 32.0)	6.0 (4.0, 14.1)
IQR	3.3	0.9	0.9	3.3	0.8	1.0	3.4	0.9	1.2	3.3	0.8	1.2
Test not done (%)	1,245 (68.6)	1,595 (83.8)	176 (77.2)	2,023 (65.1)	2,392 (76.9)	295 (85.8)	2,124 (62.9)	2,821 (76.4)	273 (69.3)	4,147 (64.0)	5,213 (76.6)	568 (77.0)
Missing (%)	753 (29.3)	891 (31.9)	118 (34.1)	578 (15.7)	627 (16.8)	113 (24.7)	616 (15.4)	509 (12.1)	103 (20.7)	1,194 (15.6)	1,136 (14.3)	216 (22.6)

*only for 2013

Year	2011 – 2013			2014			2015			2014 – 2015		
	Diabetic	Non-diabetic	Unknown	Diabetic	Non-diabetic	Unknown	Diabetic	Non-diabetic	Unknown	Diabetic	Non-diabetic	Unknown
Diabetes status												
Total	6,284 (42.6)	6,638 (45.0)	792 (5.4)	3,687 (43.6)	3,736 (44.2)	457 (5.4)	3,991 (42.9)	4,202 (45.1)	497 (5.3)	7,678 (43.2)	7,938 (44.7)	954 (5.4)
Left ventricular ejection fraction, %												
N	2,808	2,975	363	1,813	2,001	239	2,079	2,475	261	3,892	4,476	500
Mean (SD)	45.7 (13.5)	47.4 (12.8)	47.5 (13.7)	45.7 (13.5)	47.2 (12.8)	47.6 (12.7)	45.7 (13.1)	47.2 (12.5)	46.5 (12.4)	45.7 (13.3)	47.2 (12.6)	47.0 (12.5)
Median (min, max)	45.0 (5.3, 89.0)	48.0 (6.3, 87.0)	49.0 (7.2, 79.0)	45.0 (5.5, 90.0)	47.0 (5.1, 88.0)	49.0 (15.0, 77.0)	45.0 (5.9, 90.0)	47.0 (5.3, 90.0)	45.0 (6.0, 75.0)	45.0 (5.5, 90.0)	47.0 (5.1, 90.0)	48.0 (6.0, 77.0)
IQR	20.0	15.0	19.0	20.0	15.0	15.0	18.0	15.0	16.0	19.0	15.0	15.0
Test not done (%)	2,579 (47.9)	2,708 (47.7)	321 (46.9)	1,610 (47.0)	1,468 (42.3)	173 (42.0)	1,673 (44.6)	1,573 (38.9)	209 (44.5)	3,283 (45.8)	3,041 (40.5)	382 (43.3)
Missing (%)	897 (14.3)	955 (14.4)	108 (13.6)	264 (7.2)	267 (7.1)	45 (9.8)	239 (6.0)	154 (3.7)	27 (5.4)	503 (6.6)	421 (5.3)	72 (7.5)
ECG, No. (%)												
Inferior leads	1,860 (29.6)	2,375 (35.8)	303 (38.3)	1,085 (29.4)	1,274 (34.1)	181 (39.6)	1,192 (29.9)	1,507 (35.9)	211 (42.5)	2,277 (29.7)	2,781 (35.0)	392 (41.1)
Anterior leads	2,504 (39.8)	2,827 (42.6)	377 (47.6)	1,436 (38.9)	1,591 (42.6)	217 (47.5)	1,432 (35.9)	1,709 (40.7)	232 (46.7)	2,868 (37.4)	3,300 (41.6)	449 (47.1)
Lateral leads	1,817 (28.9)	1,561 (23.5)	185 (23.4)	1,215 (33.0)	1,049 (28.1)	129 (28.2)	1,355 (34.0)	1,147 (27.3)	134 (27.0)	2,570 (33.5)	2,196 (27.7)	263 (27.6)
True posterior	228 (3.6)	309 (4.7)	53 (6.7)	117 (3.2)	172 (4.6)	26 (5.7)	141 (3.5)	213 (5.1)	24 (4.8)	258 (3.4)	385 (4.9)	50 (5.2)
Right ventricle	169 (2.7)	220 (3.3)	41 (5.2)	99 (2.7)	123 (3.3)	20 (4.4)	103 (2.6)	193 (4.6)	30 (6.0)	202 (2.6)	316 (4.0)	50 (5.2)
None	878 (14.0)	804 (12.1)	56 (7.1)	508 (13.8)	518 (13.9)	31 (6.8)	620 (15.5)	556 (13.2)	22 (4.4)	1,128 (14.7)	1,074 (13.5)	53 (5.6)
Not stated/ inadequately described	394 (6.3)	364 (5.5)	33 (4.2)	296 (8.0)	146 (3.9)	18 (3.9)	288 (7.2)	200 (4.8)	23 (4.6)	584 (7.6)	346 (4.4)	41 (4.3)

Year	2011 – 2013			2014			2015			2014 – 2015		
	Diabetic	Non-diabetic	Unknown	Diabetic	Non-diabetic	Unknown	Diabetic	Non-diabetic	Unknown	Diabetic	Non-diabetic	Unknown
Total	6,284 (42.6)	6,638 (45.0)	792 (5.4)	3,687 (43.6)	3,736 (44.2)	457 (5.4)	3,991 (42.9)	4,202 (45.1)	497 (5.3)	7,678 (43.2)	7,938 (44.7)	954 (5.4)
Total number of STEMI patients who were given fibrinolytic therapy at this centre	1,327 (21.1)	1,749 (26.3)	283 (35.7)	659 (17.9)	862 (23.1)	138 (30.2)	629 (15.8)	889 (21.2)	171 (34.4)	1,288 (16.8)	1,751 (22.1)	309 (32.4)
Pain-to-needle time, min (** symptom to treatment)												
N	993	1,349	225	537	732	120	522	758	154	1,059	1,490	274
Mean (SD)	308.3 (257.6)	281.3 (259.8)	281.4 (225.1)	315.7 (265.0)	289.9 (251.3)	268.4 (217.4)	288.2 (238.6)	278.1 (241.6)	282.9 (240.2)	302.2 (252.6)	283.9 (246.4)	276.5 (230.2)
Median (min, max)	225.0 (15.0, 1439.0)	190.0 (15.0, 1390.0)	210.0 (40.0, 1222.0)	230.0 (28.0, 1380.0)	210.0 (15.0, 1425.0)	217.5 (30.0, 1320.0)	210.0 (15.0, 1370.0)	195.0 (20.0, 1440.0)	210.0 (31.0, 1430.0)	225.0 (15.0, 1380.0)	200.0 (15.0, 1440.0)	212.5 (30.0, 1430.0)
IQR	255.0	210.0	205.0	233.0	207.5	202.5	215.0	192.0	235.0	225.0	200.0	220.0
Missing (%)	334 (25.2)	400 (22.9)	58 (20.5)	122 (18.5)	130 (15.1)	18 (13.0)	107 (17.0)	131 (14.7)	17 (9.9)	229 (17.8)	261 (14.9)	35 (11.3)
Pain-to-needle time, No (%)												
≤ 180 min	401 (40.4)	652 (48.3)	102 (45.3)	205 (38.2)	311 (42.5)	51 (42.5)	223 (42.7)	346 (45.6)	65 (42.2)	428 (40.4)	657 (44.1)	116 (42.3)
> 180 min	592 (59.6)	697 (51.7)	123 (54.7)	332 (61.8)	421 (57.5)	69 (57.5)	299 (57.3)	412 (54.4)	89 (57.8)	631 (59.6)	833 (55.9)	158 (57.7)
Missing	334	400	58	122	130	18	107	131	17	229	261	35

Table 3.5 Cardiac presentation of patients with ACS by pre-morbid hypertension, NCVd-ACS Registry, 2014 – 2015

Year	2011 – 2013			2014			2015			2014 – 2015		
	Hypertensive	Non-hypertensive	Unknown	Hypertensive	Non-hypertensive	Unknown	Hypertensive	Non-hypertensive	Unknown	Hypertensive	Non-hypertensive	Unknown
Hypertension status												
Total	8,974 (60.8)	4,222 (28.6)	605 (4.1)	5,141 (60.8)	2,449 (29.0)	380 (4.5)	5,671 (60.9)	2,658 (28.5)	439 (4.7)	10,812 (60.8)	5,107 (28.7)	819 (4.6)
ACS stratum, No. (%)												
STEMI	3,788 (42.2)	2,582 (61.2)	440 (72.7)	1,843 (35.8)	1,461 (59.7)	286 (75.3)	2,065 (36.4)	1,573 (59.2)	349 (79.5)	3,908 (36.1)	3,034 (59.4)	635 (77.5)
NSTEMI	2,642 (29.4)	955 (22.6)	88 (14.5)	1,428 (27.8)	489 (20.0)	58 (15.3)	1,697 (29.9)	572 (21.5)	64 (14.6)	3,125 (28.9)	1,061 (20.8)	122 (14.9)
UA	2,544 (28.3)	685 (16.2)	77 (12.7)	1,870 (36.4)	499 (20.4)	36 (9.5)	1,909 (33.7)	513 (19.3)	26 (5.9)	3,779 (35.0)	1,012 (19.8)	62 (7.6)
Systolic blood pressure, mmHg												
N	8,541	3,935	596	5,054	2,405	369	5,562	2,618	428	10,616	5,023	797
Mean (SD)	141.7 (30.1)	129.7 (26.0)	131.6 (28.2)	144.0 (30.0)	131.5 (26.0)	131.2 (27.0)	142.8 (28.9)	131.0 (25.2)	133.2 (28.5)	143.4 (29.5)	131.3 (25.6)	132.3 (27.8)
Median (min, max)	140.0 (50.0, 270.0)	128.0 (52.0, 268.0)	129.0 (61.0, 233.0)	141.0 (54.0, 269.0)	130.0 (50.0, 266.0)	128.0 (69.0, 236.0)	140.0 (55.0, 264.0)	129.0 (50.0, 250.0)	131.5 (54.0, 237.0)	141.0 (54.0, 269.0)	130.0 (50.0, 266.0)	130.0 (54.0, 237.0)
IQR	39.0	33.0	35.0	38.0	33.0	31.0	37.0	31.0	33.5	37.0	32.0	33.0
Missing (%)	433 (4.8)	287 (6.8)	9 (1.5)	87 (1.7)	44 (1.8)	11 (2.9)	109 (1.9)	40 (1.5)	11 (2.5)	196 (1.8)	84 (1.6)	22 (2.7)
Diastolic blood pressure, mmHg												
N	8,521	3,927	595	5,049	2,405	370	5,561	2,617	428	10,610	5,022	798
Mean (SD)	81.8 (18.8)	78.3 (16.8)	79.1 (18.4)	82.6 (18.9)	79.7 (17.1)	79.9 (18.9)	81.7 (17.7)	79.2 (16.4)	80.9 (17.9)	82.2 (18.3)	79.5 (16.7)	80.4 (18.4)
Median (min, max)	80.0 (10.0, 170.0)	78.0 (21.0, 162.0)	78.0 (10.0, 148.0)	81.0 (20.0, 167.0)	79.0 (21.0, 157.0)	78.5 (21.0, 155.0)	80.0 (20.0, 170.0)	78.0 (27.0, 148.0)	80.0 (24.0, 159.0)	81.0 (20.0, 170.0)	78.0 (21.0, 157.0)	80.0 (21.0, 159.0)
IQR	22.0	22.0	22.0	24.0	21.0	23.0	22.0	20.0	21.0	23.0	20.0	22.0
Missing (%)	453 (5.0)	295 (7.0)	10 (1.7)	92 (1.8)	44 (1.8)	10 (2.6)	110 (1.9)	41 (1.5)	11 (2.5)	202 (1.9)	85 (1.7)	21 (2.6)

Year	2011			2014			2015			2014 – 2015		
	Hypertensive	Non-hypertensive	Unknown	Hypertensive	Non-hypertensive	Unknown	Hypertensive	Non-hypertensive	Unknown	Hypertensive	Non-hypertensive	Unknown
Hypertension status												
Total	8,974 (60.8)	4,222 (28.6)	605 (4.1)	5,141 (60.8)	2,449 (29.0)	380 (4.5)	5,671 (60.9)	2,658 (28.5)	439 (4.7)	10,812 (60.8)	5,107 (28.7)	819 (4.6)
Pulse pressure, mmHg												
N	8,152	3,869	581	4,789	2,362	361	5,307	2,574	421	10,096	4,936	782
Mean (SD)	57.5 (18.1)	50.7 (16.1)	51.6 (16.5)	58.7 (18.2)	51.0 (15.7)	50.7 (16.1)	58.6 (18.3)	51.0 (15.6)	51.4 (16.6)	58.7 (18.3)	51.0 (15.7)	51.0 (16.4)
Median (min, max)	56.0 (1.0, 100.0)	49.0 (1.0, 100.0)	50.0 (11.0, 100.0)	58.0 (2.0, 100.0)	50.0 (6.0, 100.0)	49.0 (11.0, 100.0)	58.0 (2.0, 100.0)	49.0 (6.0, 100.0)	49.0 (8.0, 100.0)	58.0 (2.0, 100.0)	49.0 (6.0, 100.0)	49.0 (8.0, 100.0)
IQR	26.0	20.0	22.0	26.0	20.0	21.0	26.0	20.0	21.0	26.0	20.0	21.0
Missing (%)	822 (9.2)	353 (8.4)	24 (4.0)	352 (6.8)	87 (3.6)	19 (5.0)	364 (6.4)	84 (3.2)	18 (4.1)	716 (6.6)	171 (3.3)	37 (4.5)
Heart rate at presentation, beats/min												
N	8,496	3,911	591	4,999	2,383	358	5,539	2,607	421	10,538	4,990	779
Mean (SD)	84.2 (21.1)	81.9 (20.2)	83.6 (23.9)	84.4 (21.3)	83.4 (22.2)	82.8 (21.1)	83.6 (21.1)	81.8 (20.5)	81.4 (21.1)	84.0 (21.2)	82.6 (21.3)	82.0 (21.1)
Median (min, max)	82.0 (25.0, 200.0)	80.0 (20.0, 198.0)	81.0 (34.0, 198.0)	82.0 (26.0, 200.0)	80.0 (24.0, 200.0)	80.0 (35.0, 190.0)	81.0 (20.0, 196.0)	80.0 (25.0, 198.0)	78.0 (30.0, 180.0)	82.0 (20.0, 200.0)	80.0 (24.0, 200.0)	79.0 (30.0, 190.0)
IQR	28.0	26.0	28.0	27.0	28.0	25.0	27.0	24.0	23.0	27.0	26.0	25.0
Missing (%)	478 (5.3)	311 (7.4)	14 (2.3)	142 (2.8)	66 (2.7)	22 (5.8)	132 (2.3)	51 (1.9)	18 (4.1)	274 (2.5)	117 (2.3)	40 (4.9)
Episodes of angina in past 24 hours, No. (%)												
0 – 2	3,315 (41.1)	1,812 (47.1)	215 (37.5)	1,998 (41.7)	1,093 (48.2)	155 (43.1)	2,898 (53.7)	1,366 (53.6)	242 (56.9)	4,896 (48.1)	2,459 (51.1)	397 (50.6)
> 2	292 (3.6)	105 (2.7)	14 (2.4)	169 (3.5)	60 (2.6)	5 (1.4)	284 (5.3)	88 (3.5)	8 (1.9)	453 (4.4)	148 (3.1)	13 (1.7)
Not available	4,465 (55.3)	1,928 (50.1)	345 (60.1)	2,626 (54.8)	1,114 (49.1)	200 (55.6)	2,210 (41.0)	1,093 (42.9)	175 (41.2)	4,836 (47.5)	2,207 (45.8)	375 (47.8)
Missing (%)	902	377	31	348	182	20	279	111	14	627	293	34

Year	2011 – 2013			2014			2015			2014 – 2015		
	Hypertensive	Non-hypertensive	Unknown	Hypertensive	Non-hypertensive	Unknown	Hypertensive	Non-hypertensive	Unknown	Hypertensive	Non-hypertensive	Unknown
Hypertension status												
Total	8,974 (60.8)	4,222 (28.6)	605 (4.1)	5,141 (60.8)	2,449 (29.0)	380 (4.5)	5,671 (60.9)	2,658 (28.5)	439 (4.7)	10,812 (60.8)	5,107 (28.7)	819 (4.6)
Killip classification code, No. (%)												
I	3,715 (51.3)	2,221 (61.1)	276 (52.2)	2,692 (66.9)	1,472 (70.1)	206 (60.6)	2,879 (50.8)	1,515 (57.0)	242 (55.1)	5,571 (67.6)	2,987 (70.5)	448 (61.4)
II	1,253 (17.3)	534 (14.7)	91 (17.2)	714 (17.8)	322 (15.3)	67 (19.7)	663 (11.7)	296 (11.1)	74 (16.9)	1,377 (16.7)	618 (14.6)	141 (19.3)
III	365 (5.0)	97 (2.7)	20 (3.8)	247 (6.1)	71 (3.4)	15 (4.4)	273 (4.8)	84 (3.2)	16 (3.6)	520 (6.3)	155 (3.7)	31 (4.2)
IV	633 (8.7)	307 (8.4)	77 (14.6)	366 (9.1)	234 (11.1)	52 (15.3)	406 (7.2)	239 (9.0)	58 (13.2)	772 (9.4)	473 (11.2)	110 (15.1)
Not stated/ inadequately described	1,276 (17.6)	477 (13.1)	65 (12.3)	2 (0.0)	1 (0.0)	0 (0.0)	1,450 (25.6)	524 (19.7)	49 (11.2)	2 (0.0)	1 (0.0)	0 (0.0)
Not available	1,096	344	40	1,119	349	40	0	0	0	2,569	873	89
Missing (%)	636	242	36	1	0	0	0	0	0	1	0	0
Total cholesterol, mmol/L												
N	6,211	3,180	468	3,796	1,914	288	4,429	2,128	342	8,225	4,042	630
Mean (SD)	5.0 (1.4)	5.4 (1.4)	5.5 (1.5)	4.9 (1.4)	5.3 (1.5)	5.5 (1.4)	4.9 (1.4)	5.3 (1.4)	5.7 (1.5)	4.9 (1.4)	5.3 (1.4)	5.6 (1.5)
Median (min, max)	4.8 (2.0, 16.9)	5.3 (2.0, 17.0)	5.4 (2.2, 14.0)	4.7 (2.0, 14.4)	5.2 (2.0, 22.0)	5.5 (2.2, 11.0)	4.7 (2.0, 14.9)	5.2 (2.0, 11.8)	5.6 (2.6, 15.5)	4.7 (2.0, 14.9)	5.2 (2.0, 22.0)	5.5 (2.2, 15.5)
IQR	1.8	1.8	1.9	1.9	1.8	2.0	1.9	1.8	2.0	1.9	1.8	2.0
Test not done (%)	2,134 (25.6)	709 (18.2)	90 (16.1)	1,078 (22.1)	406 (17.5)	64 (18.2)	1,052 (19.2)	406 (16.0)	80 (19.0)	2,130 (20.6)	812 (16.7)	144 (18.6)
Missing (%)	629 (7.0)	333 (7.9)	47 (7.8)	267 (5.2)	129 (5.3)	28 (7.4)	190 (3.4)	124 (4.7)	17 (3.9)	457 (4.2)	253 (5.0)	45 (5.5)
HDL-C, mmol/L												
N	6,032	3,092	443	3,737	1,868	281	4,380	2,117	342	8,117	3,985	623
Mean (SD)	1.1 (0.4)	1.1 (0.3)	1.1 (0.3)	1.1 (0.3)	1.1 (0.3)	1.1 (0.3)	1.1 (0.3)	1.1 (0.3)	1.1 (0.4)	1.1 (0.3)	1.1 (0.3)	1.1 (0.3)
Median (min, max)	1.0 (0.5, 4.6)	1.0 (0.5, 4.9)	1.0 (0.5, 4.1)	1.0 (0.5, 4.6)	1.0 (0.5, 4.7)	1.1 (0.5, 2.3)	1.0 (0.5, 4.6)	1.0 (0.5, 4.9)	1.0 (0.5, 4.1)	1.0 (0.5, 4.6)	1.0 (0.5, 4.9)	1.0 (0.5, 4.1)
IQR	0.3	0.3	0.4	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3
Test not done (%)	2,237 (27.1)	764 (19.8)	115 (20.6)	1,090 (22.6)	421 (18.4)	66 (19.0)	1,063 (19.5)	412 (16.3)	80 (19.0)	2,153 (21.0)	833 (17.3)	146 (19.0)
Missing (%)	705 (7.9)	366 (8.7)	47 (7.8)	314 (6.1)	160 (6.5)	33 (8.7)	228 (4.0)	129 (4.9)	17 (3.9)	542 (5.0)	289 (5.7)	50 (6.1)

Year	2011 – 2013			2014			2015			2014 – 2015		
	Hypertensive	Non-hypertensive	Unknown	Hypertensive	Non-hypertensive	Unknown	Hypertensive	Non-hypertensive	Unknown	Hypertensive	Non-hypertensive	Unknown
Hypertension status												
Total	8,974 (60.8)	4,222 (28.6)	605 (4.1)	5,141 (60.8)	2,449 (29.0)	380 (4.5)	5,671 (60.9)	2,658 (28.5)	439 (4.7)	10,812 (60.8)	5,107 (28.7)	819 (4.6)
LDL-C, mmol/L												
N	6,064	3,102	442	3,753	1,879	284	4,400	2,124	339	8,153	4,003	623
Mean (SD)	3.1 (1.3)	3.5 (1.3)	3.7 (1.4)	3.0 (1.3)	3.5 (1.3)	3.7 (1.3)	3.0 (1.3)	3.4 (1.3)	3.8 (1.3)	3.0 (1.3)	3.5 (1.3)	3.7 (1.3)
Median (min, max)	2.9 (0.5, 12.3)	3.4 (0.6, 12.0)	3.6 (0.7, 12.2)	2.8 (0.5, 18.0)	3.4 (0.5, 14.8)	3.5 (0.9, 8.9)	2.9 (0.5, 13.0)	3.4 (0.5, 9.7)	3.7 (0.9, 9.1)	2.9 (0.5, 18.0)	3.4 (0.5, 14.8)	3.6 (0.9, 9.1)
IQR	1.6	1.7	1.7	1.6	1.6	1.8	1.7	1.6	1.6	1.7	1.6	1.7
Test not done (%)	2,294 (27.4)	799 (20.5)	121 (21.5)	1,137 (23.3)	445 (19.1)	68 (19.3)	1,101 (20.0)	421 (16.5)	86 (20.2)	2,238 (21.5)	866 (17.8)	154 (19.8)
Missing (%)	616 (6.9)	321 (7.6)	42 (6.9)	251 (4.9)	125 (5.1)	28 (7.4)	170 (3.0)	113 (4.3)	14 (3.2)	421 (3.9)	238 (4.7)	42 (5.1)
Triglycerides, mmol/L												
N	6,171	3,147	461	3,789	1,895	285	4,423	2,121	343	8,212	4,016	628
Mean (SD)	1.7 (1.1)	1.8 (1.2)	1.8 (1.2)	1.7 (1.1)	1.7 (1.0)	1.7 (1.2)	1.7 (1.0)	1.7 (1.0)	1.8 (1.1)	1.7 (1.0)	1.7 (1.0)	1.7 (1.2)
Median (min, max)	1.5 (0.5, 15.0)	1.5 (0.5, 14.6)	1.5 (0.5, 15.0)	1.4 (0.5, 13.3)	1.4 (0.5, 14.4)	1.4 (0.5, 12.2)	1.5 (0.5, 13.9)	1.4 (0.5, 12.6)	1.4 (0.5, 9.0)	1.4 (0.5, 13.9)	1.4 (0.5, 14.4)	1.4 (0.5, 12.2)
IQR	0.9	1.0	0.9	0.9	0.9	1.0	0.9	0.9	1.0	0.9	0.9	1.0
Test not done (%)	2,163 (26.0)	734 (18.9)	96 (17.2)	1,087 (22.3)	419 (18.1)	65 (18.6)	1,053 (19.2)	407 (16.1)	78 (18.5)	2,140 (20.7)	826 (17.1)	143 (18.5)
Missing (%)	640 (7.1)	341 (8.1)	48 (7.9)	265 (5.2)	135 (5.5)	30 (7.9)	195 (3.4)	130 (4.9)	18 (4.1)	460 (4.3)	265 (5.2)	48 (5.9)
* HbA1c, mmol/L												
N	660	240	30	1,326	486	44	1,537	598	118	2,863	1,084	162
Mean (SD)	7.7 (2.3)	7.7 (3.3)	7.9 (4.6)	7.5 (2.5)	7.5 (2.8)	7.8 (4.3)	7.8 (2.5)	7.8 (3.5)	7.0 (2.2)	7.7 (2.5)	7.7 (3.2)	7.2 (2.9)
Median (min, max)	7.2 (4.2, 16.5)	6.4 (4.3, 32.0)	6.1 (5.4, 30.0)	6.7 (4.0, 32.0)	6.3 (4.0, 30.0)	6.3 (4.9, 31.0)	7.1 (4.1, 32.0)	6.4 (4.1, 32.0)	6.0 (4.0, 14.1)	6.9 (4.0, 32.0)	6.3 (4.0, 32.0)	6.1 (4.0, 31.0)
IQR	2.9	3.1	2.9	2.9	3.5	3.4	3.1	3.4	2.7	3.0	3.5	2.8
Test not done (%)	1,904 (74.3)	991 (80.5)	134 (81.7)	3,021 (69.5)	1,509 (75.6)	238 (84.4)	3,312 (68.3)	1,682 (73.8)	232 (66.3)	6,333 (68.9)	3,191 (74.6)	470 (74.4)
Missing (%)	1,066 (29.4)	626 (33.7)	94 (36.4)	794 (15.4)	454 (18.5)	98 (25.8)	822 (14.5)	378 (14.2)	89 (20.3)	1,616 (14.9)	832 (16.3)	187 (22.8)

*only for 2013

Year	2011 – 2013			2014			2015			2014 – 2015		
	Hypertensive	Non-hypertensive	Unknown	Hypertensive	Non-hypertensive	Unknown	Hypertensive	Non-hypertensive	Unknown	Hypertensive	Non-hypertensive	Unknown
Hypertension status												
Total	8,974 (60.8)	4,222 (28.6)	605 (4.1)	5,141 (60.8)	2,449 (29.0)	380 (4.5)	5,671 (60.9)	2,658 (28.5)	439 (4.7)	10,812 (60.8)	5,107 (28.7)	819 (4.6)
Left ventricular ejection fraction, %												
N	3,992	1,921	291	2,529	1,336	217	3,005	1,599	240	5,534	2,935	457
Mean (SD)	46.5 (13.5)	46.8 (12.6)	47.0 (14.0)	46.8 (13.6)	46.1 (12.4)	48.0 (12.7)	46.6 (13.2)	46.1 (12.1)	47.5 (11.8)	46.7 (13.4)	46.1 (12.2)	47.7 (12.2)
Median (min, max)	47.0 (5.3, 88.0)	46.0 (6.3, 89.0)	48.0 (7.2, 79.0)	46.0 (5.1, 88.0)	45.0 (5.3, 90.0)	50.0 (15.0, 77.0)	46.0 (5.9, 85.0)	45.0 (5.3, 90.0)	45.5 (6.0, 80.0)	46.0 (5.1, 88.0)	45.0 (5.3, 90.0)	48.0 (6.0, 80.0)
IQR	18.0	15.0	20.0	18.0	17.0	15.0	17.0	15.0	15.0	17.0	15.0	15.0
Test not done (%)	3,746 (48.4)	1,642 (46.1)	235 (44.7)	2,237 (46.9)	924 (40.9)	129 (37.3)	2,325 (43.6)	952 (37.3)	180 (42.9)	4,562 (45.2)	1,876 (39.0)	309 (40.3)
Missing (%)	1,236 (13.8)	659 (15.6)	79 (13.1)	375 (7.3)	189 (7.7)	34 (8.9)	341 (6.0)	107 (4.0)	19 (4.3)	716 (6.6)	296 (5.8)	53 (6.5)
ECG, No. (%)												
Inferior leads	2,779 (31.0)	1,554 (36.8)	234 (38.7)	1,522 (29.6)	895 (36.5)	145 (38.2)	1,726 (30.4)	1,017 (38.3)	189 (43.1)	3,248 (30.0)	1,912 (37.4)	334 (40.8)
Anterior leads	3,542 (39.5)	1,891 (44.8)	296 (48.9)	1,971 (38.3)	1,100 (44.9)	196 (51.6)	2,031 (35.8)	1,144 (43.0)	219 (49.9)	4,002 (37.0)	2,244 (43.9)	415 (50.7)
Lateral leads	2,522 (28.1)	931 (22.1)	133 (22.0)	1,667 (32.4)	650 (26.5)	99 (26.1)	1,854 (32.7)	706 (26.6)	108 (24.6)	3,521 (32.6)	1,356 (26.6)	207 (25.3)
True posterior	334 (3.7)	220 (5.2)	38 (6.3)	180 (3.5)	114 (4.7)	21 (5.5)	194 (3.4)	164 (6.2)	23 (5.2)	374 (3.5)	278 (5.4)	44 (5.4)
Right ventricle	230 (2.6)	164 (3.9)	35 (5.8)	129 (2.5)	97 (4.0)	17 (4.5)	167 (2.9)	137 (5.2)	25 (5.7)	296 (2.7)	234 (4.6)	42 (5.1)
None	1,248 (13.9)	465 (11.0)	37 (6.1)	767 (14.9)	277 (11.3)	23 (6.1)	917 (16.2)	278 (10.5)	16 (3.6)	1,684 (15.6)	555 (10.9)	39 (4.8)
Not stated/ inadequately described	600 (6.7)	172 (4.1)	21 (3.5)	388 (7.5)	90 (3.7)	12 (3.2)	397 (7.0)	103 (3.9)	17 (3.9)	785 (7.3)	193 (3.8)	29 (3.5)

Year	2011 – 2013			2014			2015			2014 – 2015		
	Hypertensive	Non-hypertensive	Unknown	Hypertensive	Non-hypertensive	Unknown	Hypertensive	Non-hypertensive	Unknown	Hypertensive	Non-hypertensive	Unknown
Hypertension status												
Total	8,974 (60.8)	4,222 (28.6)	605 (4.1)	5,141 (60.8)	2,449 (29.0)	380 (4.5)	5,671 (60.9)	2,658 (28.5)	439 (4.7)	10,812 (60.8)	5,107 (28.7)	819 (4.6)
Total number of STEMI patients who were given fibrinolytic therapy at this centre	1,831 (20.4)	1,315 (31.1)	229 (37.9)	829 (16.1)	707 (28.9)	131 (34.5)	887 (15.6)	660 (24.8)	158 (36.0)	1,716 (15.9)	1,367 (26.8)	289 (35.3)
Pain-to-needle time, min (** symptom to treatment)												
N	1,386	1,005	182	683	604	111	750	561	135	1,433	1,165	246
Mean (SD)	296.0 (259.6)	284.6 (254.0)	295.3 (245.8)	318.1 (267.8)	284.2 (245.9)	242.1 (167.1)	292.1 (244.1)	275.2 (243.2)	267.2 (218.6)	304.5 (255.9)	279.8 (244.5)	255.9 (197.1)
Median (min, max)	210.0 (15.0, 1439.0)	195.0 (15.0, 1395.0)	212.5 (40.0, 1335.0)	239.0 (30.0, 1380.0)	202.5 (15.0, 1425.0)	210.0 (40.0, 1100.0)	210.0 (15.0, 1430.0)	192.0 (20.0, 1440.0)	205.0 (40.0, 1415.0)	225.0 (15.0, 1430.0)	195.0 (15.0, 1440.0)	210.0 (40.0, 1415.0)
IQR	240.0	225.0	218.0	240.0	200.0	185.0	220.0	190.0	210.0	225.0	195.0	195.0
Missing (%)	445 (24.3)	310 (23.6)	47 (20.5)	146 (17.6)	103 (14.6)	20 (15.3)	137 (15.4)	99 (15.0)	23 (14.6)	283 (16.5)	202 (14.8)	43 (14.9)
Pain-to-needle time, No (%)												
≤ 180 min	608 (43.9)	477 (47.5)	79 (43.4)	249 (36.5)	273 (45.2)	48 (43.2)	319 (42.5)	261 (46.5)	59 (43.7)	568 (39.6)	534 (45.8)	107 (43.5)
> 180 min	778 (56.1)	528 (52.5)	103 (56.6)	434 (63.5)	331 (54.8)	63 (56.8)	431 (57.5)	300 (53.5)	76 (56.3)	865 (60.4)	631 (54.2)	139 (56.5)
Missing	445	310	47	146	103	20	137	99	23	283	202	43

* Definition was different in CRF version 2013

** Symptom to treatment is the time difference between onset of ACS symptom and when patient was given fibrinolytic therapy

Note: Not all participating centres performed Troponin T or Troponin I tests

Note: Percentage is to the nearest decimal point

Table 3.6 Cardiac presentation of patients with ACS by pre-morbid dyslipidaemia, NCVd-ACS Registry, 2014 – 2015

Year	2011 – 2013			2014			2015			2014 – 2015		
	Dyslipidaemia	Non-dyslipidaemia	Unknown	Dyslipidaemia	Non-dyslipidaemia	Unknown	Dyslipidaemia	Non-dyslipidaemia	Unknown	Dyslipidaemia	Non-dyslipidaemia	Unknown
Total	5,100 (34.5)	6,920 (46.9)	1,593 (10.8)	2,965 (35.1)	3,997 (47.3)	838 (9.9)	3,410 (36.6)	4,494 (48.3)	788 (8.5)	6,375 (35.9)	8,491 (47.8)	1,626 (9.1)
ACS stratum, No. (%)												
STEMI	1,927 (37.8)	3,734 (54.0)	1,053 (66.1)	856 (28.9)	2,125 (53.2)	564 (67.3)	977 (28.7)	2,418 (53.8)	569 (72.2)	1,833 (28.8)	4,543 (53.5)	1,133 (69.7)
NSTEMI	1,552 (30.4)	1,769 (25.6)	299 (18.7)	823 (27.8)	969 (24.2)	157 (18.7)	1,061 (31.1)	1,106 (24.6)	148 (18.8)	1,884 (29.6)	2,075 (24.4)	305 (18.8)
UA	1,621 (31.8)	1,417 (20.4)	241 (15.2)	1,286 (43.4)	903 (22.6)	117 (14.0)	1,372 (40.2)	970 (21.6)	71 (9.0)	2,658 (41.7)	1,873 (22.1)	188 (11.6)
Systolic blood pressure, mmHg												
N	4747	6569	1569	2,913	3,927	823	3,346	4,429	764	6,259	8,356	1,587
Mean (SD)	139.6 (28.7)	136.7 (29.5)	134.9 (30.3)	142.0 (27.8)	138.0 (29.9)	135.9 (30.1)	140.8 (27.7)	137.5 (28.6)	135.8 (29.9)	141.3 (27.7)	137.7 (29.2)	135.8 (30.0)
Median (min, max)	137.0 (52.0, 270.0)	135.0 (50.0, 268.0)	133.0 (55.0, 245.0)	140.0 (54.0, 260.0)	135.0 (50.0, 269.0)	133.0 (56.0, 253.0)	138.0 (55.0, 264.0)	135.0 (50.0, 257.0)	134.0 (54.0, 249.0)	139.0 (54.0, 264.0)	135.0 (50.0, 269.0)	133.0 (54.0, 253.0)
IQR	37.0	37.0	38.0	35.0	37.0	37.0	35.0	36.0	34.0	35.0	36.0	35.0
Missing (%)	353 (6.9)	351 (5.1)	24 (1.5)	52 (1.8)	70 (1.8)	15 (1.8)	64 (1.9)	65 (1.4)	24 (3.0)	116 (1.8)	135 (1.6)	39 (2.4)
Diastolic blood pressure, mmHg												
N	4735	6556	1565	2,914	3,923	823	3,347	4,426	765	6,261	8,349	1,588
Mean (SD)	80.8 (17.4)	80.6 (18.7)	80.1 (18.8)	81.6 (17.2)	81.5 (18.7)	81.5 (20.3)	80.4 (16.7)	81.2 (17.7)	81.4 (18.5)	80.9 (17.0)	81.3 (18.2)	81.5 (19.4)
Median (min, max)	80.0 (10.0, 170.0)	80.0 (10.0, 170.0)	79.0 (10.0, 160.0)	80.0 (20.0, 157.0)	80.0 (24.0, 163.0)	80.0 (21.0, 165.0)	79.0 (31.0, 170.0)	80.0 (20.0, 160.0)	80.0 (24.0, 159.0)	80.0 (20.0, 170.0)	80.0 (20.0, 163.0)	80.0 (21.0, 165.0)
IQR	21.0	23.5	23.0	22.0	23.0	24.0	21.0	21.0	22.0	21.0	22.0	23.0
Missing (%)	365 (7.2)	364 (5.3)	28 (1.8)	51 (1.7)	74 (1.9)	15 (1.8)	63 (1.8)	68 (1.5)	23 (2.9)	114 (1.8)	142 (1.7)	38 (2.3)

Year	2011 – 2013			2014			2015			2014 – 2015		
	Dyslipidaemia	Non-dyslipidaemia	Unknown	Dyslipidaemia	Non-dyslipidaemia	Unknown	Dyslipidaemia	Non-dyslipidaemia	Unknown	Dyslipidaemia	Non-dyslipidaemia	Unknown
Dyslipidaemia status												
Total	5,100 (34.5)	6,920 (46.9)	1,593 (10.8)	2,965 (35.1)	3,997 (47.3)	838 (9.9)	3,410 (36.6)	4,494 (48.3)	788 (8.5)	9,637 (35.9)	8,491 (47.8)	1,626 (9.1)
Pulse pressure, mmHg												
N	4,726	6,540	1,561	2,778	3,783	804	3,209	4,286	742	5,987	8,069	1,546
Mean (SD)	58.8 (20.9)	56.2 (20.0)	55.0 (20.2)	58.1 (17.7)	54.6 (17.6)	53.3 (17.7)	58.2 (18.1)	54.6 (17.4)	52.9 (17.2)	58.2 (17.9)	54.6 (17.5)	53.1 (17.4)
Median (min, max)	56.0 (5.0, 169.0)	53.0 (1.0, 198.0)	51.0 (1.0, 167.0)	57.0 (3.0, 100.0)	53.0 (2.0, 100.0)	51.0 (3.0, 100.0)	57.0 (6.0, 100.0)	53.0 (2.0, 100.0)	51.0 (8.0, 100.0)	57.0 (3.0, 100.0)	53.0 (2.0, 100.0)	51.0 (3.0, 100.0)
IQR	27.0	26.0	25.0	25.0	24.0	24.0	26.0	24.0	23.0	25.0	24.0	24.0
Missing (%)	551 (10.8)	561 (8.1)	77 (4.8)	187 (6.3)	214 (5.4)	34 (4.1)	201 (5.9)	208 (4.6)	46 (5.8)	388 (6.1)	422 (5.0)	80 (4.9)
Heart rate at presentation, beats/min												
N	4,717	6,534	1,563	2,898	3,879	801	3,330	4,409	758	6,228	8,288	1,559
Mean (SD)	82.9 (20.1)	83.7 (21.1)	84.1 (22.9)	83.0 (20.5)	84.8 (22.1)	84.0 (22.0)	82.0 (20.2)	83.5 (21.1)	83.9 (23.3)	82.5 (20.4)	84.1 (21.5)	83.9 (22.6)
Median (min, max)	80.0 (30.0, 195.0)	82.0 (20.0, 200.0)	82.0 (28.0, 198.0)	80.0 (26.0, 200.0)	82.0 (29.0, 200.0)	81.0 (24.0, 173.0)	80.0 (20.0, 195.0)	81.0 (25.0, 198.0)	80.0 (30.0, 189.0)	80.0 (20.0, 200.0)	81.0 (25.0, 200.0)	81.0 (24.0, 189.0)
IQR	26.0	27.0	29.0	25.0	29.0	27.0	25.0	27.0	28.0	26.0	28.0	28.0
Missing (%)	383 (7.5)	386 (5.6)	30 (1.9)	67 (2.3)	118 (3.0)	37 (4.4)	80 (2.3)	85 (1.9)	30 (3.8)	147 (2.3)	203 (2.4)	67 (4.1)
Episodes of angina in past 24 hours, No. (%)												
0 – 2	1,898 (41.5)	2,843 (45.4)	564 (37.5)	1,134 (40.6)	1,690 (45.7)	344 (44.2)	1,678 (52.2)	2,397 (55.4)	392 (51.5)	2,812 (46.8)	4,087 (51.0)	736 (47.8)
> 2	186 (4.0)	182 (3.0)	40 (2.7)	94 (3.4)	106 (2.9)	15 (1.9)	218 (6.8)	147 (3.4)	18 (2.4)	312 (5.2)	253 (3.2)	33 (2.1)
Not available	2,495 (54.5)	3,236 (51.6)	901 (59.8)	1,563 (56.0)	1,901 (51.4)	419 (53.9)	1,316 (41.0)	1,780 (41.2)	351 (46.1)	2,879 (48.0)	3,681 (45.9)	770 (50.0)
Missing (%)	521	659	88	174	300	60	198	170	27	372	470	87

Year	2011 – 2013			2014			2015			2014 – 2015		
	Dyslipidaemia	Non-dyslipidaemia	Unknown	Dyslipidaemia	Non-dyslipidaemia	Unknown	Dyslipidaemia	Non-dyslipidaemia	Unknown	Dyslipidaemia	Non-dyslipidaemia	Unknown
Total	5,100 (34.5)	6,920 (46.9)	1,593 (10.8)	2,965 (35.1)	3,997 (47.3)	838 (9.9)	3,410 (36.6)	4,494 (48.3)	788 (8.5)	6,375 (35.9)	8,491 (47.8)	1,626 (9.1)
Killip classification code, No. (%)												
I	2,154 (53.3)	3,289 (56.5)	696 (49.8)	1,624 (71.5)	2,275 (67.0)	433 (59.4)	1,734 (50.9)	2,491 (55.4)	392 (49.7)	3,358 (71.7)	4,766 (68.2)	825 (57.9)
II	633 (15.6)	997 (17.0)	223 (16.0)	404 (17.8)	547 (16.1)	141 (19.3)	377 (11.1)	507 (11.3)	140 (17.8)	781 (16.7)	1,054 (15.1)	281 (19.7)
III	195 (4.8)	226 (3.8)	57 (4.0)	105 (4.6)	175 (5.2)	45 (6.2)	126 (3.7)	196 (4.4)	44 (5.6)	231 (4.9)	371 (5.3)	89 (6.2)
IV	282 (7.0)	526 (9.0)	188 (13.5)	137 (6.0)	394 (11.6)	110 (15.1)	173 (5.1)	403 (9.0)	121 (15.4)	310 (6.6)	797 (11.4)	231 (16.2)
Not stated/ inadequately described	780 (19.3)	799 (13.7)	231 (16.7)	1 (0.0)	2 (0.1)	0 (0.0)	1,000 (29.3)	897 (20.0)	91 (11.5)	1 (0.0)	2 (0.0)	0 (0.0)
Not available	678	700	91	694	603	109	0	0	0	1,694	1,500	200
Missing	378	383	107	0	1	0	0	0	0	0	1	0
Total cholesterol, mmol/L												
N	3,560	4,999	1,157	2,173	3,066	613	2,654	3,579	601	4,827	6,645	1,214
Mean (SD)	5.0 (1.5)	5.1 (1.4)	5.4 (1.5)	4.9 (1.5)	5.1 (1.4)	5.3 (1.5)	4.9 (1.4)	5.1 (1.4)	5.4 (1.5)	4.9 (1.5)	5.1 (1.4)	5.4 (1.5)
Median (min, max)	4.9 (2.0, 16.9)	5.0 (2.0, 17.0)	5.3 (2.2, 14.0)	4.7 (2.0, 22.0)	5.0 (2.0, 16.6)	5.2 (2.1, 11.3)	4.8 (2.0, 15.5)	5.0 (2.0, 13.1)	5.3 (2.0, 14.9)	4.7 (2.0, 22.0)	5.0 (2.0, 16.6)	5.2 (2.0, 14.9)
IQR	1.9	1.8	2.0	1.9	1.8	2.0	1.9	1.8	1.9	1.9	1.8	2.0
Test not done (%)	1,203 (25.3)	1,424 (22.2)	291 (20.1)	636 (22.6)	744 (19.5)	156 (20.3)	651 (19.7)	751 (17.3)	135 (18.3)	1,287 (21.1)	1,495 (18.4)	291 (19.3)
Missing (%)	337 (6.6)	497 (7.2)	145 (9.1)	156 (5.3)	187 (4.7)	69 (8.2)	105 (3.1)	164 (3.6)	52 (6.6)	261 (4.1)	351 (4.1)	121 (7.4)
HDL-C, mmol/L												
N	3,470	4,876	1,078	2,139	3,003	600	2,619	3,563	591	4,758	6,566	1,191
Mean (SD)	1.1 (0.4)	1.1 (0.4)	1.1 (0.3)	1.1 (0.4)	1.1 (0.3)	1.1 (0.3)	1.1 (0.4)	1.1 (0.3)	1.1 (0.4)	1.1 (0.4)	1.1 (0.3)	1.1 (0.3)
Median (min, max)	1.0 (0.5, 4.6)	1.0 (0.5, 4.9)	1.0 (0.5, 3.3)	1.0 (0.5, 4.5)	1.0 (0.5, 4.7)	1.0 (0.5, 2.3)	1.0 (0.5, 4.3)	1.0 (0.5, 4.9)	1.0 (0.5, 4.6)	1.0 (0.5, 4.5)	1.0 (0.5, 4.9)	1.0 (0.5, 4.6)
IQR	0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.4	0.3	0.4	0.3	0.3
Test not done (%)	1,245 (26.4)	1,497 (23.5)	359 (25.0)	638 (23.0)	766 (20.3)	161 (21.2)	657 (20.1)	755 (17.5)	142 (19.4)	1,295 (21.4)	1,521 (18.8)	303 (20.3)
Missing (%)	385 (7.5)	547 (7.9)	156 (9.8)	188 (6.3)	228 (5.7)	77 (9.2)	134 (3.9)	176 (3.9)	55 (7.0)	322 (5.1)	404 (4.8)	132 (8.1)

Year	2011 – 2013			2014			2015			2014 – 2015		
	Dyslipidaemia	Non-dyslipidaemia	Unknown	Dyslipidaemia	Non-dyslipidaemia	Unknown	Dyslipidaemia	Non-dyslipidaemia	Unknown	Dyslipidaemia	Non-dyslipidaemia	Unknown
Total	5,100 (34.5)	6,920 (46.9)	1,593 (10.8)	2,965 (35.1)	3,997 (47.3)	838 (9.9)	3,410 (36.6)	4,494 (48.3)	788 (8.5)	6,375 (35.9)	8,491 (47.8)	1,626 (9.1)
LDL-C, mmol/L												
N	3,485	4,901	1,085	2,137	3,024	609	2,622	3,576	598	4,759	6,600	1,207
Mean (SD)	3.2 (1.3)	3.3 (1.3)	3.5 (1.3)	3.0 (1.2)	3.3 (1.3)	3.5 (1.4)	3.0 (1.3)	3.3 (1.2)	3.6 (1.3)	3.0 (1.3)	3.3 (1.3)	3.5 (1.4)
Median (min, max)	3.0 (0.5, 12.3)	3.2 (0.5, 12.0)	3.4 (0.7, 12.2)	2.8 (0.5, 11.4)	3.2 (0.5, 14.8)	3.4 (0.7, 18.0)	2.9 (0.6, 13.0)	3.2 (0.5, 9.7)	3.5 (0.6, 9.1)	2.8 (0.5, 13.0)	3.2 (0.5, 14.8)	3.4 (0.6, 18.0)
IQR	1.7	1.6	1.8	1.7	1.6	1.7	1.7	1.6	1.7	1.7	1.6	1.8
Test not done (%)	1,284 (26.9)	1,545 (24.0)	368 (25.3)	679 (24.1)	797 (20.9)	163 (21.1)	682 (20.6)	778 (17.9)	147 (19.7)	1,361 (22.2)	1,575 (19.3)	310 (20.4)
Missing (%)	331 (6.5)	474 (6.8)	140 (8.8)	149 (5.0)	176 (4.4)	66 (7.9)	106 (3.1)	140 (3.1)	43 (5.5)	255 (4.0)	316 (3.7)	109 (6.7)
Triglycerides, mmol/L												
N	3,533	4,956	1,147	2,169	3,047	607	2,638	3,582	602	4,807	6,629	1,209
Mean (SD)	1.8 (1.1)	1.7 (1.1)	1.7 (1.1)	1.8 (1.1)	1.7 (1.0)	1.7 (0.9)	1.7 (1.1)	1.7 (1.0)	1.7 (1.0)	1.8 (1.1)	1.7 (1.0)	1.7 (1.0)
Median (min, max)	1.5 (0.5, 15.0)	1.4 (0.5, 14.5)	1.5 (0.5, 14.6)	1.5 (0.5, 13.3)	1.4 (0.5, 14.4)	1.5 (0.5, 7.1)	1.5 (0.5, 13.9)	1.4 (0.5, 11.2)	1.5 (0.5, 9.0)	1.5 (0.5, 13.9)	1.4 (0.5, 14.4)	1.5 (0.5, 9.0)
IQR	1.0	0.9	0.9	1.0	0.9	0.9	0.9	0.9	0.9	1.0	0.9	0.9
Test not done (%)	1,222 (25.7)	1,455 (22.7)	300 (20.7)	643 (22.9)	757 (19.9)	159 (20.8)	647 (19.7)	755 (17.4)	135 (18.3)	1,290 (21.2)	1,512 (18.6)	294 (19.6)
Missing (%)	345 (6.8)	509 (7.4)	146 (9.2)	153 (5.2)	193 (4.8)	72 (8.6)	125 (3.7)	157 (3.5)	51 (6.5)	278 (4.4)	350 (4.1)	123 (7.6)
* HbA1c, mmol/L												
N	406	428	81	853	885	99	930	1,118	196	1,783	2,003	295
Mean (SD)	7.6 (2.2)	7.9 (2.9)	7.6 (3.4)	7.4 (2.4)	7.6 (2.7)	7.9 (3.6)	7.8 (2.4)	7.8 (3.1)	7.7 (2.9)	7.6 (2.4)	7.7 (2.9)	7.8 (3.2)
Median (min, max)	7.0 (4.3, 16.5)	6.9 (4.2, 32.0)	6.6 (4.2, 30.0)	6.6 (4.0, 31.0)	6.6 (4.0, 32.0)	6.6 (4.7, 31.0)	7.1 (4.1, 26.0)	6.6 (4.1, 32.0)	6.6 (4.0, 32.0)	6.8 (4.0, 31.0)	6.6 (4.0, 32.0)	6.6 (4.0, 32.0)
IQR	2.7	3.5	2.9	2.6	3.5	3.2	3.1	3.2	3.6	2.8	3.3	3.5
Test not done (%)	1,096 (73.0)	1,615 (79.1)	300 (78.7)	1,697 (66.5)	2,436 (73.4)	522 (84.1)	1,942 (67.6)	2,847 (71.8)	421 (68.2)	3,639 (67.1)	5,283 (72.5)	943 (76.2)
Missing (%)	601 (28.6)	927 (31.2)	227 (37.3)	415 (14.0)	676 (16.9)	217 (25.9)	538 (15.8)	529 (11.8)	171 (21.7)	953 (14.9)	1,205 (14.2)	388 (23.9)

*only for 2013

Year	2011 – 2013			2014			2015			2014 – 2015		
	Dyslipidaemia	Non-dyslipidaemia	Unknown	Dyslipidaemia	Non-dyslipidaemia	Unknown	Dyslipidaemia	Non-dyslipidaemia	Unknown	Dyslipidaemia	Non-dyslipidaemia	Unknown
Total	5,100 (34.5)	6,920 (46.9)	1,593 (10.8)	2,965 (35.1)	3,997 (47.3)	838 (9.9)	3,410 (36.6)	4,494 (48.3)	788 (8.5)	6,375 (35.9)	8,491 (47.8)	1,626 (9.1)
Left ventricular ejection fraction, %												
N	2,235	3,085	780	1,392	2,157	468	1,691	2,704	427	3,083	4,861	895
Mean (SD)	46.9 (13.5)	46.3 (12.8)	46.9 (14.1)	47.7 (13.8)	45.9 (12.7)	46.4 (13.0)	47.4 (13.2)	46.0 (12.6)	46.3 (12.6)	47.6 (13.5)	45.9 (12.6)	46.3 (12.8)
Median (min, max)	48.0 (5.3, 88.0)	46.0 (6.3, 89.0)	48.0 (7.2, 88.0)	48.0 (5.1, 90.0)	45.0 (5.3, 85.0)	47.0 (15.0, 80.0)	48.0 (5.3, 86.0)	45.0 (6.0, 90.0)	45.0 (6.0, 76.0)	48.0 (5.1, 90.0)	45.0 (5.3, 90.0)	46.0 (6.0, 80.0)
IQR	19.0	17.0	18.0	17.0	18.0	18.0	15.0	15.0	17.0	15.0	16.0	17.0
Test not done	2,183 (49.4)	2,807 (47.6)	600 (43.5)	1,366 (49.5)	1,547 (41.8)	291 (38.3)	1,471 (46.5)	1,646 (37.8)	305 (41.7)	2,837 (47.9)	3,193 (39.6)	596 (40.0)
Missing (%)	682 (13.4)	1,028 (14.9)	213 (13.4)	207 (7.0)	293 (7.3)	79 (9.4)	248 (7.3)	144 (3.2)	56 (7.1)	455 (7.1)	437 (5.1)	135 (8.3)
ECG, No. (%)												
Inferior leads	1,521 (29.8)	2,388 (34.6)	596 (37.4)	824 (27.8)	1,380 (34.5)	322 (38.4)	967 (28.4)	1,627 (36.2)	313 (39.7)	1,791 (28.1)	3,007 (35.4)	635 (39.1)
Anterior leads	1,920 (37.6)	2,992 (43.2)	744 (46.8)	1,085 (36.6)	1,736 (43.4)	404 (48.2)	1,089 (31.9)	1,905 (42.4)	391 (49.6)	2,174 (34.1)	3,641 (42.9)	795 (48.9)
Lateral leads	1,340 (26.2)	1,803 (26.0)	394 (24.8)	982 (33.1)	1,180 (29.5)	218 (26.0)	1,112 (32.6)	1,337 (29.8)	197 (25.0)	2,094 (32.8)	2,517 (29.6)	415 (25.5)
True posterior	169 (3.4)	306 (4.4)	109 (6.8)	84 (2.8)	176 (4.4)	50 (6.0)	114 (3.3)	220 (4.9)	41 (5.2)	198 (3.1)	396 (4.7)	91 (5.6)
Right ventricle	99 (2.0)	239 (3.4)	85 (5.4)	56 (1.9)	151 (3.8)	35 (4.2)	70 (2.1)	215 (4.8)	40 (5.1)	126 (2.0)	366 (4.3)	75 (4.6)
None	809 (15.8)	830 (12.0)	100 (6.2)	512 (17.3)	487 (12.2)	63 (7.5)	635 (18.6)	535 (11.9)	36 (4.6)	1,147 (18.0)	1,022 (12.0)	99 (6.1)
Not stated/ inadequately described	392 (7.6)	309 (4.4)	81 (5.0)	226 (7.6)	165 (4.1)	25 (3.0)	290 (8.5)	177 (3.9)	28 (3.6)	516 (8.1)	342 (4.0)	53 (3.3)

Year	2011 – 2013			2014			2015			2014 – 2015		
	Dyslipidaemia	Non-dyslipidaemia	Unknown	Dyslipidaemia	Non-dyslipidaemia	Unknown	Dyslipidaemia	Non-dyslipidaemia	Unknown	Dyslipidaemia	Non-dyslipidaemia	Unknown
Total	5,100 (34.5)	6,920 (46.9)	1,593 (10.8)	2,965 (35.1)	3,997 (47.3)	838 (9.9)	3,410 (36.6)	4,494 (48.3)	788 (8.5)	6,375 (35.9)	8,491 (47.8)	1,626 (9.1)
Total number of STEMI patients who were given fibrinolytic therapy at this centre	929 (18.2)	1,821 (26.3)	567 (35.6)	371 (12.5)	1,003 (25.1)	264 (31.5)	399 (11.7)	1,009 (22.5)	280 (35.5)	770 (12.1)	2,012 (23.7)	544 (33.5)
Pain-to-needle time, min (* symptom to treatment)												
N	723	1,365	442	303	842	226	346	849	240	649	1,691	466
Mean (SD)	287.6 (261.4)	291.2 (256.0)	295.2 (249.7)	296.5 (261.1)	296.4 (252.4)	289.9 (235.9)	264.1 (228.4)	290.7 (244.2)	282.3 (250.1)	279.3 (244.6)	293.5 (248.2)	286.0 (243.1)
Median (min, max)	195.0 (15.0, 1439.0)	210.0 (15.0, 1400.0)	210.0 (20.0, 1350.0)	205.0 (30.0, 1380.0)	220.0 (15.0, 1425.0)	220.0 (30.0, 1320.0)	187.5 (20.0, 1370.0)	205.0 (20.0, 1440.0)	210.0 (15.0, 1430.0)	195.0 (20.0, 1380.0)	210.0 (15.0, 1440.0)	220.0 (15.0, 1430.0)
IQR	245.0	220.0	230.0	235.0	213.0	205.0	215.0	210.0	221.5	210.0	210.0	215.0
Missing (%)	206 (22.2)	456 (25.0)	125 (22.0)	68 (18.3)	161 (16.1)	38 (14.4)	53 (13.3)	160 (15.9)	40 (14.3)	121 (15.7)	321 (16.0)	78 (14.3)
Pain-to-needle time, No. (%)												
≤ 180 min	351 (48.5)	602 (44.1)	195 (44.1)	129 (42.6)	343 (40.7)	92 (40.7)	171 (49.4)	361 (42.5)	104 (43.3)	300 (46.2)	704 (41.6)	196 (42.1)
> 180 min	372 (51.5)	763 (55.9)	247 (55.9)	174 (57.4)	499 (59.3)	134 (59.3)	175 (50.6)	488 (57.5)	136 (56.7)	349 (53.8)	987 (58.4)	270 (57.9)
Missing	206	456	125	68	161	38	53	160	40	121	321	78

* Definition was different in CRF version 2013

** Symptom to treatment is the time difference between onset of ACS symptom and when patient was given fibrinolytic therapy

Note: Not all participating centres performed Troponin T or Troponin I tests

Note: Percentage is to the nearest decimal point

Table 3.7 TIMI risk score of patients with ACS by ACS stratum, NCV-D-ACS Registry, 2014 – 2015

Year	2011 – 2013			2014			2015			2014 – 2015		
	STEMI	NSTEMI/UA	Total	STEMI	NSTEMI/UA	Total	STEMI	NSTEMI/UA	Total	STEMI	NSTEMI/UA	Total
ACS stratum												
Total	7,502	7,261	3,886	4,572	4,304	5,009	8,190	9,581				
TIMI Risk Score, No. (%)												
0	108 (1.4)	697 (9.6)	74 (1.9)	299 (6.5)	67 (1.6)	347 (6.9)	141 (1.7)	646 (6.7)				
1	759 (10.1)	1,597 (22.0)	374 (9.6)	866 (18.9)	507 (11.8)	990 (19.8)	881 (10.8)	1,856 (19.4)				
2	1,374 (18.3)	1,955 (26.9)	763 (19.6)	1,187 (26.0)	885 (20.6)	1,253 (25.0)	1,648 (20.1)	2,440 (25.5)				
3	1,215 (16.2)	1,734 (23.9)	641 (16.5)	1,089 (23.8)	709 (16.5)	1,246 (24.9)	1,350 (16.5)	2,335 (24.4)				
4	1,071 (14.3)	908 (12.5)	553 (14.2)	740 (16.2)	646 (15.0)	766 (15.3)	1,199 (14.6)	1,506 (15.7)				
5	1,130 (15.1)	306 (4.2)	568 (14.6)	315 (6.9)	580 (13.5)	334 (6.7)	1,148 (14.0)	649 (6.8)				
6	651 (8.7)	58 (0.8)	316 (8.1)	72 (1.6)	290 (6.7)	65 (1.3)	606 (7.4)	137 (1.4)				
7	541 (7.2)	6 (0.1)	287 (7.4)	4 (0.1)	292 (6.8)	8 (0.2)	579 (7.1)	12 (0.1)				
8	284 (3.8)		130 (3.3)		158 (3.7)		288 (3.5)					
9	186 (2.5)		95 (2.4)		88 (2.0)		183 (2.2)					
10	127 (1.7)		58 (1.5)		55 (1.3)		113 (1.4)					
11	34 (0.5)		12 (0.3)		19 (0.4)		31 (0.4)					
12	19 (0.3)		12 (0.3)		6 (0.1)		18 (0.2)					
13	3 (0.0)		3 (0.1)		2 (0.0)		5 (0.1)					